

2920	87769523 (5639, 5840)			<p>35696286, 22276997, 264259, 52645080, 29331824, 29331826, 29331827, 264428, 264909, 56182435, 264511, 264758, 33109954, 21906754, 52644296, 265010, 265011, 264601, 265017, 265019, 264681, 264687, 21906767, 265021, 52644150, 264690, 264691, 264692, 33657109, 33657182, 27486262, 27486264, 27486265, 35696423, 35695855, 264632, 264636, 264637, 264638, 56182323, 60170394, 18108385, 87768518, 60432113</p> <p>Contains protein domain (PF00787) - PX domain</p>
2921	91639982 (5841, 5842)	Novel Protein sim. GBank gi 4580013 gb AA024202.1 UR3184 - (UR3184) TPAF4-associated factor 2 [Homo sapiens]		<p>264094, 264259, 29331822, 29331824, 29331826, 29331827, 35696052, 29146498, 264104, 264105, 264107, 264509, 264110, 264112, 264512, 60433356, 21906754, 87768474, 265017, 18108351, 264288, 21906765, 21906766, 21906767, 21906769, 35695917, 265021, 263974, 18108374, 263978, 263977, 18108376, 284555, 263881, 56526486, 87768518, 22279000, 22279002</p> <p>Contains protein domain (PF01074) - kinase</p> <p>Glycosyl hydrolases family 38</p>
2922	87749762 (5843, 5844)	Novel Protein sim. GBank gi 458514 db BAJ76779.1 - (AB023152) KIAA0835 protein [Homo sapiens]		<p>264908, 264909, 264511, 22279000, 265008, 264593, 33657402, 60174639, 18108351, 264763, 21906765, 29148627, 35695917, 264692, 264629, 263978, 55811576, 35695855, 264555, 284558, 56182322, 60170394, 22279000, 264486</p> <p>Contains protein domain (PF00169) - struct</p> <p>PH domain</p>
2923	85337789 (5845, 5846)	Novel Protein sim. GBank gi 433268 emb CAB42838.2 - (Z83844) d3J7E16.4 (similar to mouse p116Rip protein) [Homo sapiens]		<p>264488, 18108397, 22278995, 22278996, 22278997, 22278998, 22278999, 29331825, 29331826, 29331827, 29331830, 264511, 265009, 33657402, 265011, 265017, 265018, 264683, 18108354, 21906765, 21906767, 21906768, 21906769, 52644150, 264691, 264692, 33657109, 263974, 18108376, 264631, 264636, 18108385, 18108387, 22279000, 264553, 264566</p> <p>Contains protein domain (PF00444) - ribosomal prot</p> <p>Ribosomal protein L36</p>
2924	87791967 (5847, 5848)	Novel Protein sim. GBank gi 213095 pf S72254 - ribosomal protein L36, mitochondrial - yeast (Saccharomyces cerevisiae)		<p>265017, 264628, 20281152, 264556</p>
2925	95090120 (5849, 5850)	Novel Protein sim. GBank gi 238898 emb CAB11718 - (Z98980) actin associated protein [Schistosoma haematophyllum]		<p>56182575, 35696286, 264259, 60432289, 29331827, 264508, 52644045, 264910, 264591, 60432229, 55812038, 21906754, 264681, 264448, 264683, 264288, 264685, 52644229, 264689, 21906765, 21906766, 21906768, 21906769, 265021, 265022, 60170615, 264692, 33657023, 264693, 33657109, 35696423, 56247491, 56182323</p> <p>UNCLASSIFIED</p>

2826	95343003 (5851, 5852)	Novel Protein sim. GBank gij283032iprj522456 - hydroxyproline-rich glycoprotein - perantial leucine		29331828, 265011, 264768, 264689, 264764, 264288, 264630, 264637
2827	80408018 (5853, 5854)			264559
2828	20452179 (5855, 5856)	Novel Protein sim. GBank gij413320(emh)(CAA06919) - (A-006215) CMP-N-acetylneuraminic acid synthetase [Mus musculus]	UNCLASSIFIED	264559
2829	91622920 (5857, 5858)		UNCLASSIFIED	264559, 264488, 22278994, 35696286, 22278996, 22278998, 22278999, 264094, 264259, 52645080, 29331822, 29331824, 66714117, 29331825, 29331826, 29331827, 35696052, 33569970, 264109, 29331830, 52644045, 265009, 33109954, 52644296, 87168559, 264760, 264762, 264448, 264764, 264288, 264766, 264768, 21906765, 21906766, 21906768, 21906769, 35695917, 264691, 33657023, 264693, 33657109, 18108374, 263976, 35696423, 35695855, 263981, 22279000, 22279002, 264567, 264486
2830	95302755 (5859, 5860)		UNCLASSIFIED	56182575, 56181686, 35696286, 22278996, 22278998, 22278999, 264259, 29331825, 60432289, 29331828, 264905, 52644045, 56182435, 265009, 60170831, 264592, 60432229, 60433356, 87168474, 265010, 265011, 265017, 265018, 265019, 264762, 264448, 264683, 264288, 264766, 21906765, 21906769, 35695917, 60170615, 33657023, 33657109, 264628, 18108370, 18108372, 35696423, 35695855, 264556, 56182323, 60432113, 264567
2831	94312693 (5861, 5862)	Novel Protein sim. GBank gij3786433 (AF098505) - similar to Arabidopsis thaliana male sterility protein 2 (SW-Q08891) [Caenorhabditis elegans]	Contains protein domain (PF00471) - Ribosomal protein L33	52645156, 22278997, 22278998, 29331822, 52645080, 29331824, 60432289, 33656970, 60433356, 60433438, 33109954, 21906765, 21906766, 21906767, 21906768, 265020, 52644150, 33657023, 33657109, 33657182, 27486285, 35696423, 35695855, 264555, 87168518, 60432113, 264566
2832	79632623 (5863, 5864)	Novel Protein sim. GBank gij3378056 (AF017777) - helicase [Drosophila melanogaster]	helicase	264905, 264807
2833	91720776 (5865, 5866)			264488, 18108392, 56182575, 22278999, 264091, 264259, 29331825, 60432289, 29331827, 264508, 52644045, 56182435, 265007, 265009, 264592, 60433356, 60433438, 21906754, 265017, 264682, 264288, 52644229, 21906765, 21906766, 21906768, 21906769, 265022, 52644150, 33657023, 33657109, 27486265, 264635, 264636, 60170394, 56182323, 18108385, 60432113, 264555, 264556, 264567

2934	86576025 (5867, 5868)				22278997, 22278999, 29331824, 33657402, 264691, 27486262, 264628, 87168518, 22279000
2935	86410579 (5869, 5870)			UNCLASSIFIED	56182575, 22278995, 60433356, 33657402, 264756, 33109954, 21906754, 265018, 265019, 264448, 264769, 21906764, 21906765, 265021, 264692, 33657023, 33657109, 33657349, 55810764, 22279000
2936	87603863 (5871, 5872)	Novel Protein sim. GBank g14153862 (AC005065) - determined by GENSCAN prediction and spliced EST; match to EST R84328 (NID942735) [Homo sapiens]	Contains protein domain (PF00856) - SET domain	nuclease	22278997, 29331827, 29331828, 265009, 265017, 264605, 265020, 55811576, 18108387, 60432113, 264563
2937	94830396 (5873, 5874)	Novel Protein sim. GBank g15174409 (NP_008101, 1pCD2B - CD2 antigen (cytoplasmic tail)-binding protein 2		UNCLASSIFIED	56994075, 22278999, 264259, 60432049, 29331822, 56182181, 29331827, 29331828, 264906, 264908, 264909, 56182435, 265006, 264512, 264910, 60170831, 60433358, 265011, 265018, 18108351, 264448, 264288, 264766, 52644229, 21906765, 29148784, 65274791, 264558, 56182323, 60170394, 264558, 60432113, 284565, 264486, 264567
2938	95419773 (5875, 5876)	Novel Protein sim. GBank g13319990 (emb CAA76720) - (Y117267) ubiquitin-conjugating enzyme [Mus musculus]	Contains protein domain (PF00179) - Ubiquitin-conjugating enzyme	ubiquitin	264488, 56182575, 22278996, 35696286, 22278997, 22278998, 22278999, 264490, 264259, 29331822, 29331824, 66714117, 29331827, 35696052, 284107, 264905, 86712502, 52644045, 56182435, 264511, 265008, 265009, 60432228, 33657402, 60433438, 55812038, 21906754, 85658542, 265010, 265011, 87168559, 265017, 265018, 265019, 264681, 264288, 264689, 21906765, 21906767, 21906766, 55811957, 35659917, 265020, 60170515, 264690, 264691, 264692, 33657023, 264693, 65274620, 33657109, 18108370, 18108374, 263976, 35696423, 35694855, 264555, 264556, 18108381, 56182323, 60170394, 83373044, 18108385, 55526486, 60432113, 22279002
2939	87766622 (5877, 5878)	Novel Protein sim. GBank g13979900 (emb CAA99909) - (Z79547) similar to WD domain, G-beta repeat; cDNA EST YK371b7.5 comes from this gene; cDNA EST YK312n1.5 comes from this gene; cDNA EST YK465d5.5 comes from this gene; cDNA EST YK472c4.5 comes from this gene; cDNA EST YK292b...	Contains protein domain (PF00400) - WD domain, G-beta repeat	ATPase-associated	264907, 265018, 264681, 264685, 264686

2940	95011103 (5878, 5880)			UNCLASSIFIED	22278986, 29331822, 29331824, 56774117, 29331826, 29331828, 264905, 264908, 66712502, 29331830, 265011, 265017, 264764, 264369, 21906766, 21906767, 33657023, 33657109, 32833986, 18108374, 18108377, 264634, 83373044, 18108385, 18108387, 264566, 264567
2941	21423370 (5881, 5882)	Novel Protein sim. GBank gij3413872dijAA323001 - (AS007824) KIAA0455 protein [Homo sapiens]		UNCLASSIFIED	264567
2942	87430203 (5883, 5884)	Novel Protein sim. GBank gij1172845jup46823jRB25_RABIT - RAS-RELATED PROTEIN RAB-25		glycoprotein	264910, 265010, 264768
2943	95314504 (5885, 5886)	Novel Protein sim. GBank gij492853jgijAD34087.1 (AF15185) CGI-92 protein [Homo sapiens]		collagen	60432049, 264269, 60432289, 29331827, 29148498, 265008, 264593, 60433356, 60434338, 265010, 265011, 265017, 265018, 264683, 264766, 18108381, 65274727, 60432113, 264567
2944	95081063 (5887, 5888)	Novel Protein sim. GBank gij467823jembjCAB41190.11 - (AL049860) 1-acylphenol-3-phosphate acyltransferase-like protein [Arabidopsis thaliana]	Contains protein domain (PF00415) - ATPase associated Regulator of chromosome condensation (RCC1)		56994075, 22278998, 60432048, 264759, 29331822, 29331824, 60424968, 60432289, 29331826, 29331828, 264905, 264907, 52644045, 264909, 264511, 265006, 265009, 264594, 21906754, 87168559, 264603, 265017, 265018, 18108351, 264682, 264766, 264687, 264689, 21906765, 21906766, 21906767, 21906768, 21906769, 265021, 60170615, 52644150, 264690, 264691, 33657023, 264692, 264693, 33657109, 33657182, 33657349, 18108370, 18108374, 18108377, 55811576, 35696421, 35695855, 264635, 264555, 264556, 56182323, 60170384, 264558, 264559, 83373044, 56326486, 87168518, 60432113, 22279002, 264482, 264563, 264484, 264567
2945	94233560 (5889, 5890)	Novel Protein sim. GBank gij728531gip29189jALU1_HUMAN - IIII ALU SUBFAMILY J WARNING ENTRY IIII	Contains protein domain (PF00096) - Zinc finger, C2H2 type	UNCLASSIFIED	60424179, 22278995, 22278998, 22278999, 264259, 56182181, 29331824, 60424269, 60432289, 55696052, 264908, 265006, 60433356, 55812038, 264759, 55811366, 265018, 264681, 18108351, 264448, 264683, 264369, 264288, 264687, 56181562, 21906767, 21906768, 21906769, 33695917, 265020, 265021, 264693, 60431528, 55810764, 35696423, 35695855, 264630, 60170384, 83373044, 22279000, 264566, 264567

2946	94317315 (5891, 5892)	[Novel Protein sim. GBank gi35441952 p AA043195.1 AF072864) peroxisomal membrane protein PMP 24 [Homo sapiens]	UNCLASSIFIED	264488, 264259, 264508, 264509, 264906, 264907, 264909, 264510, 264511, 265007, 264512, 264910, 264591, 264593, 18108351, 264794, 264288, 264684, 264789, 265021, 264692, 33857109, 264628, 264629, 18108374, 264631, 264634, 264636, 264637, 18108380, 264638, 264639, 83373044, 264585, 264586, 264486, 264587
2947	87362552 (5893, 5894)	[Novel Protein sim. GBank gi3544281 p AA043383.1 - (AF058116) Ali-1 related protein [Fugu rubripes]	UNCLASSIFIED	22278995, 22278996, 22278997, 22278999, 28146488, 264508, 29331830, 265007, 265008, 265009, 60432229, 21906754, 265010, 265017, 265019, 264786, 264685, 21906785, 21906786, 21906767, 21906768, 21906769, 265020, 264628, 18108370, 264629, 264630, 18108387, 60432113
2948	87626527 (5895, 5896)	[Novel Protein sim. GBank gi3566851 p AA056554.2 - (AF001533) mliogen-induced [Mus musculus]		52646642, 22278995, 264259, 29331824, 29331825, 29331827, 29331830, 264909, 265007, 265009, 265019, 264783, 264684, 264286, 264685, 264688, 21906767, 264691, 264692, 264693, 18108374, 55811576, 18108385, 22278992, 264583, 264587
2949	88175545 (5897, 5898)	[Novel Protein sim. GBank gi2132923 p J57133 - probable membrane protein YOR240w - yeast (Saccharomyces cerevisiae)]	UNCLASSIFIED	22278996, 22278997, 60432285, 29331828, 29331827, 29331828, 35096052, 29146499, 284104, 284107, 264905, 66712502, 284908, 60433396, 60433438, 87168559, 264764, 52644228, 56181562, 21906767, 21906768, 21906769, 265022, 60170815, 33857023, 35098423, 263981, 264558, 60432113, 22279002
2950	95086870 (5899, 5900)	[Novel Protein sim. GBank gi4661028 p 346291Y03.6 CAEEL - PUTATIVE AMINOPEPTIDASE ZK333.6 IN CHROMOSOME III]	- peptidase Cytochrome amineopeptidase family	264488, 35696286, 264259, 35096052, 264907, 265007, 264910, 265017, 265018, 264288, 264788, 35695917, 265020, 18108382, 18108370, 18108379, 35696423, 65274791, 35695855, 264556, 56526486, 264486
2951	87392357 (5901, 5902)	[Novel Protein sim. GBank gi4688902 p CAB41450.1 - (AJ238248) centaurin beta2 [Homo sapiens]		264489

2552	98329542 (5903, 5904)	Novel Protein sim. GBank g[559663jmbj]CAB51405.1j - (AL096881) hypothetical protein [Homo sapiens]	Contains protein domain (PF00650) - CRAL/TRIO domain.	transcript factor	264687, 52645156, 21906766, 21906769, 22278986, 265020, 264690, 60432049, 264259, 264693, 29331822, 18108365, 29331825, 60432289, 33657109, 18108368, 29331827, 35696092, 27486262, 264508, 264905, 20281149, 264906, 264907, 29331830, 264908, 264909, 35695855, 264511, 265008, 265009, 264910, 264635, 264636, 60432229, 264638, 60433356, 264639, 264756, 87168518, 265017, 22279000, 22279002, 264760, 264563, 264482, 18108351, 264448, 264288, 18108356, 56994075, 22278996, 29331822, 29331824, 29331825, 29331827, 35696052, 264508, 264905, 264906, 264907, 264510, 264591, 264594, 33657402, 264595, 264596, 264756, 52646317, 21906754, 33657084, 52644296, 87168559, 264600, 264760, 264881, 18108351, 264764, 264389, 264288, 264887, 21906765, 21906766, 21906767, 21906768, 21906769, 35695917, 33657023, 18108384, 52645129, 33657109, 33657249, 18108374, 263978, 35695855, 264637, 264638, 87168518, 264482, 264563, 264565, 29331822
2553	88083375 (5903, 5906)	Novel Protein sim. GBank g[119822isp]P10656ISERC, RABIT - PROBABLE PHOSPHOSERINE AMINOTRANSFERASE (PSAT) (ENDOMETRIAL PROGESTERONE-INDUCED PROTEIN) (EPiP)	Contains protein domain (PF00269) - UNCLASSIFIED Aminotransferases class-V		
2554	88088288 (5907, 5908)	Novel Protein sim. GBank g[488526]jefNP_005251.1pGDF9 - growth differentiation factor 9	Contains protein domain (PF00019) - Transforming growth factor beta like domain	- Igf	
2555	87698426 (5908, 5910)	Novel Protein sim. GBank g[3452473]AF084205 - serine/threonine protein kinase TAO1 [Rattus norvegicus]	Contains protein domain (PF00069) - Eukaryotic protein kinase domain	kinase	264259, 29331822, 29331824, 29331825, 29331826, 35696092, 264908, 52644045, 264512, 60432229, 265018, 265019, 55811150, 264769, 21906767, 21906768, 21906769, 265021, 60170615, 55810764, 264567
2556	85789745 (5911, 5912)	Novel Protein sim. GBank g[6689254]b[AA027830.1]AF12185 - (AF12185) sorting nexin 7 [Homo sapiens]	Contains protein domain (PF00787) - PX domain		22278996, 264259, 29331827, 264908, 21906768
2557	90933301 (5913, 5914)	Novel Protein sim. GBank g[4503023]jefNP_000089.1pCPT2 - carnitine palmitoyltransferase II precursor		cadherin	22278999, 264259, 29331824, 29331827, 265008, 264595, 264758, 265010, 265011, 264448, 264763, 264683, 264288, 264685, 18108357, 29148629, 264690, 18108362, 264693, 18108370, 60431528, 18108374, 264634, 18108381, 56182323, 18108382, 18108385, 18108388, 95526486, 87168518, 264482, 264487
2558	87440014 (5915, 5916)	Novel Protein sim. GBank g[4240257]b[BA74907.1] - (AB020691) KIAA0884 protein [Homo sapiens]			264395, 264596, 264681, 264369, 264629, 264631, 264567

2559	95109420 (5917, 5918)	Novel Protein sim. GBank g1598646 (mbj) CAB05177.2] - (Z82285) predicted using GeneFinder, similar to WD domain; G-beta repeats [Caenorhabditis elegans]	Contains protein domain (PF00568) - Oncogene TBC domain	2633894, 2227897, 264259, 60432049, 29331826, 29331828, 35698052, 29331830, 66712502, 56182435, 265006, 264512, 265008, 265009, 60433356, 60433438, 264596, 265017, 265018, 264683, 264288, 264766, 264769, 21906766, 21906767, 21906769, 265020, 60170615, 264692, 27486265, 18108374, 65274791, 35695855, 83373044, 56526486, 60432113, 35698286, 56182435, 87168474, 265010, 60170615, 35696423, 56182323, 18108383, 87168518, 264483
2960	87420091 (5919, 5920)		UNCLASSIFIED	2227897, 2227898, 264259, 29331822, 29331824, 29331826, 29331828, 264907, 264908, 52644045, 265006, 33657402, 21906754, 87168474, 265011, 87168559, 265017, 21906769, 265020, 60170615, 264692, 33657023, 35695763, 18108370, 18108374, 35696423, 264632, 264636, 18108395, 87168518, 22278002, 264554, 264587
2962	87912700 (5923, 5924)		UNCLASSIFIED	35698286, 2227897, 264902, 264094, 264259, 29331824, 66714117, 29331825, 60432289, 29331828, 29331827, 29331828, 35698052, 264508, 264905, 264509, 264907, 264908, 264909, 264510, 264512, 264593, 264594, 60433438, 264758, 52646317, 264602, 264603, 264605, 264760, 264762, 264764, 264288, 264766, 264688, 264768, 264769, 35695917, 265020, 264691, 264634, 264636, 264637, 264638, 264639, 18108385, 264563, 264635, 264566, 264567, 264486, 18108392, 56594075, 2227898, 2227899, 29331822, 29331825, 29331826, 264592, 264594, 29331828, 265007, 265008, 264592, 264594, 21906754, 265018, 264760, 264697, 29148627, 29148784, 265020, 33657023, 264693, 65274620, 33657182, 27486261, 264629, 55810754, 35696423, 264555, 264636, 264637, 264557, 264558, 264563, 264259, 29331828, 33657402, 265017, 265018, 264692, 18108368, 35696423, 83373044, 18108388
2963	95313464 (5925, 5926)	Novel Protein sim. GBank g1420223 (dj) BAA74850.1] - (AB020574) KIAA0867 protein [Homo sapiens]	Contains protein domain (PF00101) - Helix-loop-helix DNA-binding domain	2633894, 2227897, 264259, 60432049, 29331826, 29331828, 35698052, 29331830, 66712502, 56182435, 265006, 264512, 265008, 265009, 60433356, 60433438, 264596, 265017, 265018, 264683, 264288, 264766, 264769, 21906766, 21906767, 21906769, 265020, 60170615, 264692, 27486265, 18108374, 65274791, 35695855, 83373044, 56526486, 60432113, 35698286, 56182435, 87168474, 265010, 60170615, 35696423, 56182323, 18108383, 87168518, 264483
2964	94324617 (5927, 5928)		UNCLASSIFIED	2227897, 2227898, 264259, 29331822, 29331824, 29331826, 29331828, 264907, 264908, 52644045, 265006, 33657402, 21906754, 87168474, 265011, 87168559, 265017, 21906769, 265020, 60170615, 264692, 33657023, 35695763, 18108370, 18108374, 35696423, 264632, 264636, 18108395, 87168518, 22278002, 264554, 264587

2965	80384762 (5929, 5930)	Novel Protein sim. GBank gi 485447 t NP_005452.1 KRLML - Kreisler (mouse) mal-related leucine zipper homolog		Transcript factor	264259, 29331826, 264508, 264509, 264906, 264907, 264908, 264909, 264511, 265008, 264910, 264591, 264593, 264594, 33857402, 265011, 264760, 264762, 264764, 264288, 264895, 264766, 264692, 33857109, 264628, 264829, 35995855, 264630, 264631, 264632, 264834, 264635, 264636, 264637, 264638, 264639, 264563, 264567, 18103391
2966	91725248 (5931, 5932)	Novel Protein sim. GBank gi 526275 t mbi C4845690.1 - (A243177) Xenopus RPA interacting protein alpha [Xenopus laevis]			60432289, 264682, 264448
2967	94658303 (5933, 5934)	Novel Protein sim. GBank gi 624225 (U19181) - Rabn3 [Rattus norvegicus]		UNCLASSIFIED	264488, 264508, 264509, 264908, 264909, 264511, 264910, 264594, 264758, 65656542, 264762, 264764, 265021, 264556, 18106381, 264564, 264486
2968	95302776 (5935, 5936)	Novel Protein sim. GBank gi 4922715 g AD34118.1 AF15188 - (AF151881) CGI-123 protein [Homo sapiens]	Contains protein domain (PF00097) - Zinc finger, C2H2 type (RING finger)		264687, 52645156, 21006765, 52646365, 21906767, 18106398, 35696423, 2278996, 35996286, 22278997, 265020, 22278999, 265021, 265022, 264093, 264638, 264690, 52644150, 264259, 33857023, 52645080, 264693, 29331822, 56182181, 29331824, 66714117, 29331825, 33109954, 52645129, 29331826, 21006754, 33857182, 29331827, 29331828, 35696052, 27486262, 87168518, 87168474, 265010, 87168556, 265018, 22279000, 265019, 22279002, 264563, 18106351, 264906, 264907, 264448, 86712502, 264566, 264569, 264288
2969	95310557 (5937, 5938)	Novel Protein sim. GBank gi 3024743 g C24734 T4SA_SULST - THERMOSOME, ALPHA SUBUNIT (CHAPERONIN ALPHA SUBUNIT)		eph	52646842, 22278996, 22278998, 22278999, 60432049, 264259, 29331824, 29331825, 29331826, 29331828, 265009, 264909, 52644045, 56182435, 265009, 60433438, 55812038, 21006754, 265011, 87168559, 265018, 265019, 264448, 264288, 264369, 52644229, 21006766, 21006768, 29148794, 265020, 265021, 52644150, 264691, 33857109, 18106374, 56182323, 60170394, 87168518, 60432113, 22279000
2970	88068071 (5939, 5940)	Novel Protein sim. GBank gi 3165407 (AC04755) - fos37502.1 [Homo sapiens]	Contains protein domain (PF00046) - Homeobox domain	homeobox	

2971	94196930 (5941, 5942)	Novel Protein sim. GBank gi 286375p p39194 ALU7_HUMAN - IIII ALU SUBFAMILY SQ WARNING ENTRY IIII		lm7	264488, 56182575, 35066286, 56994075, 29331824, 29331826, 29146490, 264508, 264905, 264907, 264112, 264910, 21906754, 87168559, 265018, 265019, 18108351, 264689, 21906765, 21906767, 21906768, 265020, 265021, 60170815, 18108364, 264628, 264629, 18108374, 264636, 264556, 264558, 83373044, 18108384, 18108385, 87168518, 264564, 264567
2972	86625943 (5943, 5944)	Novel Protein sim. GBank gi 28635p p39193 ALU6_HUMAN - IIII ALU SUBFAMILY SP WARNING ENTRY IIII		kinase	265017, 35695917, 265021, 33657109, 22279002, 264563
2973	91215301 (5945, 5946)	Novel Protein sim. GBank gi 2746789 (AF040642) - No definition line found [Caenorhabditis elegans]		UNCLASSIFIED	264563
2974	91673002 (5947, 5948)	Novel Protein sim. GBank gi 786117 (L18134) - nuclear protein [Ensis minor]		UNCLASSIFIED	29331822, 264692, 33657349, 55811578, 18108392, 52644507, 36182575, 56181886, 22278995, 22278996, 35066286, 22278997, 22278998, 22278999, 264259, 52645080, 29331824, 29331825, 66714117, 60424269, 29331826, 29331827, 29331828, 35696052, 66712502, 264908, 52644045, 265007, 264910, 265009, 80433438, 33109954, 21906754, 55811386, 52644296, 87168474, 87168559, 265017, 265018, 265019, 18108351, 264448, 264369, 264288, 52644229, 18108359, 21906765, 21906767, 21906768, 35695917, 265020, 265021, 52644150, 264691, 264692, 33657023, 27486262, 27486264, 35695783, 18108370, 18108376, 55810764, 55811576, 35696423, 35695955, 264630, 264635, 264557, 52644332, 264558, 83373044, 18108387, 87168518, 60432113, 22279000, 264482, 264487
2975	96325213 (5949, 5950)	Novel Protein sim. GBank gi 3800812 emb CAA19508 (AL023339) similar to HECT-domain (ubiquitin-transferase); cDNA EST Y448010.5 comes from this gene [Caenorhabditis elegans]		ubiquitin	29331824, 29331827, 29331828, 264910, 85858542, 265011, 265018, 264448, 264488, 264789, 21906767, 265020, 264691, 264559, 83373044
2976	87771202 (5951, 5952)	Novel Protein sim. GBank gi 5679136 p AA046874.1 AF16093 - (AF160934) BcDNA LD14189 [Drosophila melanogaster]		transport	22278996, 264906, 265007, 265010, 265011, 265017, 265018, 18108351, 264685, 264689, 18108370, 264639, 18108385
2977	91725254 (5953, 5954)	Novel Protein sim. GBank gi 528275 emb CAB45690.1 - (A1243177) Xenopus RPA interacting protein alpha [Xenopus laevis]		UNCLASSIFIED	264509, 264288

2878	87332059 (5955, 5956)	Novel Protein sim. GBank g1746549 (U23522) - No definition line found [Caenorhabditis elegans]	Contains protein domain (PF00480) - ROK family	UNCLASSIFIED	22278995, 22278986, 22278997, 22278999, 264259, 60432289, 29331827, 29146499, 56182435, 265006, 265007, 265009, 60433366, 60433438, 21906754, 265010, 265011, 265017, 265018, 265019, 264288, 264685, 264688, 21906765, 21906766, 21906767, 21906768, 21906769, 265020, 265021, 265022, 35696423, 264639, 60432113, 22279000, 22279002
2879	91725256 (5957, 5958)	Novel Protein sim. GBank g1526275 (Jemo)CAB45690.1] - (AJ243177) Xenopus RPA interacting protein alpha [Xenopus laevis]	complement		264486, 60274572, 56994075, 22278999, 264093, 29331822, 29331824, 264288, 55811957, 33657023, 33657109, 18106370, 55811576, 56182323, 60432113, 264482
2880	86296600 (5959, 5960)				265009, 21906767, 263981, 22279000
2881	87376330 (5961, 5962)				264629, 264564
2882	95303875 (5963, 5964)	Novel Protein sim. GBank g14929767 (gb)AAO34144.1(Af:151907) CGI-149 protein [Homo sapiens]	UNCLASSIFIED		22278995, 56994075, 22278996, 22278997, 22278998, 22278999, 264092, 29331824, 29331827, 29331828, 264905, 264591, 264592, 264594, 264595, 264596, 33657094, 264448, 21906765, 21906768, 21906767, 21906768, 21906769, 265022, 18108365, 33657182, 33657349, 35696423, 83373044, 22279000, 22279002
2883	91725258 (5965, 5966)	Novel Protein sim. GBank g1526275 (Jemo)CAB45690.1] - (AJ243177) Xenopus RPA interacting protein alpha [Xenopus laevis]			60424179, 52646842, 18108398, 22278997, 264093, 60432049, 264259, 29331822, 60432289, 33656970, 264905, 52644045, 265006, 60431735, 87166474, 265018, 265019, 18108351, 264448, 21906765, 21906768, 35695917, 33657023, 32645129, 18108370, 35696423, 83373044, 35628486, 60432113, 264404, 22279002
2884	94136487 (5967, 5968)	Novel Protein sim. GBank g12393734 (AC002542) - similar to C. elegans F11A10.5; 80% similarity to Z69297 (PID g1130619) [Homo sapiens]	ATPase_associated		
2885	87099072 (5969, 5970)	Novel Protein sim. GBank g11031604 (p1)S22126 - finger protein unknpl - fruit fly (Drosophila melanogaster)	UNCLASSIFIED		264910, 55812038, 56181562, 55811957, 264628, 55810794, 264632, 264635, 60432113
2886	86294461 (5971, 5972)				55811957, 264566
2887	86455934 (5973, 5974)		UNCLASSIFIED		264389

2988	95357753 (5975, 5976)	Novel Protein sim. GBank gi 4679028 gb AA027002.1 - (AF077207) HSPC021 [Homo sapiens]	UNCLASSIFIED	264488, 65274572, 22278995, 22278996, 22278997, 22278999, 264092, 264094, 264259, 60432049, 29331824, 29331826, 60432289, 35696052, 29331828, 264107, 264903, 264907, 264908, 69712502, 264828, 264908, 56162435, 265006, 265007, 265008, 60170831, 60432229, 264593, 60433356, 264757, 60433438, 21906754, 265010, 265011, 87168559, 265017, 265018, 264682, 264448, 264389, 264288, 264685, 5264229, 21906785, 21906787, 21906769, 35695917, 265021, 265022, 52644150, 264690, 33657023, 65274620, 263967, 33657109, 27486282, 18108370, 18108372, 18108374, 55810784, 65274791, 35695955, 264635, 264636, 264637, 263981, 264638, 56182323, 83373044, 60432113, 22279000, 264553, 264564, 264565, 264566, 264567
2989	91225118 (5977, 5978)	Novel Protein sim. GBank gi 113671 sp P23964 ALUP_HUMAN - IIII ALU CLASS F WARNING ENTRY IIII	kinase	22278996, 22278997, 264905, 264511, 60170831, 264993, 265019, 21906765, 21906767, 21906768, 18108374
2990	87330444 (5978, 5980)	Novel Protein sim. GBank gi 8289336 sp P97346 RHOD_MOUSE - RHOD-RELATED GTP-BINDING PROTEIN RHOD	Contains protein domain (PF00071) - Ras family	285007, 264512, 18108351, 264288, 264689, 285020, 264691, 33657023, 33657109
2991	94325351 (5981, 5982)		UNCLASSIFIED	284563
2992	85425164 (5983, 5984)		UNCLASSIFIED	284259, 265019, 264689, 18108385
2993	94325353 (5985, 5986)		UNCLASSIFIED	264488, 29331822, 265017, 264781, 21906769, 65274791, 263981, 264565
2994	94136634 (5987, 5988)	Novel Protein sim. GBank gi 2486549 sp Q56658 YU02_MYCTU - HYPOTHETICAL 29.7 KO PROTEIN C.Y339.02	transport	22278999, 264259, 29331822, 29331824, 29331825, 29331826, 29331827, 29331828, 265006, 265009, 264910, 33109994, 87168474, 87168559, 265018, 265019, 264448, 264288, 21906766, 21906767, 21906768, 21906769, 265021, 265022, 33657023, 264683, 35695955, 83373044, 18108385, 22279000, 264565, 264566
2995	87591070 (5989, 5990)	Novel Protein sim. GBank gi 2734081 (AF001195) - similar to oxysterol-binding proteins [Caenorhabditis elegans]		264905, 264907, 265019, 18108351, 264683
2996	91013788 (5991, 5992)	Novel Protein sim. GBank gi 2428912 (AC002201) - Similar ATP-dependent RNA Helicase [Arabidopsis thaliana]	Contains protein domain (PF00270) - DEAD/DEAH box helicase	65274572, 35696026, 264259, 29331824, 35696052, 29146499, 264506, 264907, 265007, 265008, 60433438, 18108348, 265017, 264681, 264683, 264288, 264786, 264789, 264689, 35695917, 60170615, 33657023, 264692, 264634, 264555, 18108381, 18108392, 18108388, 264484

2997	87627440 (5993, 5994)	Novel Protein sim. GBank g14589652[dbjBAJ76848.1] - (AB023221) KIAA1004 protein [Homo sapiens]	homeobox	2654488, 56182575, 264259, 6671417, 29331826, 35696052, 264508, 264509, 264507, 264908, 265006, 87168474, 265019, 264448, 264682, 264685, 264766, 21906764, 21906766, 21906768, 21906769, 27486261, 18108374, 35696423, 264634, 264635, 264636, 264557, 18108385, 87168518, 52646365, 22278997, 264508, 264906, 18108351, 21906765, 21906767, 18108370, 18108374, 35696423, 264636, 264639
2998	88095381 (5995, 5996)	Novel Protein sim. GBank g10347569[emb]CAA222521 - (AL03404) cDNA EST Y42559.3 comes from this gene; cDNA EST Y42559.3 comes from this gene; cDNA EST EMBL AF79323 comes from this gene [Caenorhabditis elegans]	UNCLASSIFIED	264488, 29331824, 29331825, 29331826, 264906, 264510, 265009, 21906754, 264682, 264688, 33657023, 264556, 264639, 60170394, 18108385, 264563
2999	94847055 (5997, 5998)	Novel Protein sim. GBank g115408[P1835]OC18_CAEEL - CUTICLE COLLAGEN 19	UNCLASSIFIED	264488, 29331824, 29331825, 29331826, 264906, 264510, 265009, 21906754, 264682, 264688, 33657023, 264556, 264639, 60170394, 18108385, 264563
3000	95099370 (5999, 6000)	Novel Protein sim. GBank g1163174 (U32575) - similar to yeast Scd3p, Swiss-Prot Accession Number P32644; similar to mammalian B94, Swiss-Prot Accession Number Q03169; Method: conceptual translation supplied by author [Rattus norvegicus]	UNCLASSIFIED	264488, 29331824, 29331825, 29331826, 264906, 264510, 265009, 21906754, 264682, 264688, 33657023, 264556, 264639, 60170394, 18108385, 264563
3001	88078454 (6001, 6002)	Novel Protein sim. GBank g12078470 (AC002073) - Putative gene. Genscan predictions confirmed by EST splicing; coded for by human cDNA AA122029 (NM_01670046), D31562 (NM_0644442), AA158721 (NM_01733515), H95640 (NM_0630333) and F13062 (NM_0709111) [Homo sapiens]	calthopsis	264488, 29331824, 29331825, 29331826, 264906, 264510, 265009, 21906754, 264682, 264688, 33657023, 264556, 264639, 60170394, 18108385, 264563
3002	87718167 (6003, 6004)	Novel Protein sim. GBank g13599478 (AF085186) - Myosin-1A [Caenorhabditis castellanii]	UNCLASSIFIED	264488, 29331824, 29331825, 29331826, 264906, 264510, 265009, 21906754, 264682, 264688, 33657023, 264556

3003	86648079 (6005, 6006)	Novel Protein sim. GBank g11754989 (U30292) - collagen type XIII alpha-1 chain [Mus musculus]	Contains protein domain (PF01381) - collagen Collagen triple helix repeat (20 copies)	254312, 254393, 254584, 254587, 254486
3004	80066976 (6007, 6008)	Novel Protein sim. GBank g12224629[gb]BAA20802 - (A002342) KIAA0344 [Homo sapiens]	Contains protein domain (PF01360) - oxygenase Monooxygenase	29331830, 21906769, 254691, 33657109, 263972, 18108385
3005	87794443 (6009, 6010)	Novel Protein sim. GBank g1680659[gb]AA027719 (JAF 13294 - (AF 132944) CGI-10 protein [Homo sapiens])	Contains protein domain (PF00023) - MHC Ank repeat	29331832, 29331824, 29331827, 60433438, 265011, 265019, 21906766, 21906767, 21906768, 265020, 33657023, 33657249, 60710394, 22279002, 264567
3006	87422224 (6011, 6012)	Novel Protein sim. GBank g13930525 (AF064447) - sex-determination protein homolog Fem1a [Mus musculus]	Contains protein domain (PF00096) - Zinc finger, C2H2 type	254259, 29331832, 264512, 21906754, 265018, 264687, 21906765, 264691, 264555, 264556, 264557, 18108385
3007	90936005 (6013, 6014)	Novel Protein sim. GBank g12365032 (U80738) - CAGH1A [Homo sapiens]	Contains protein domain (PF00096) - Zinc finger, C2H2 type	52644507, 52645136, 65274572, 264909, 264512, 265018, 264760, 264448, 264765, 264689, 60170615, 18108374, 20281152, 264636, 52644332
3008	80416249 (6015, 6016)	Novel Protein sim. GBank g13127193 (AF062389) - kidney-specific protein [Rattus norvegicus]	Contains protein domain (PF00501) - synthase AMP-binding enzyme	264805, 264593, 264766, 264638
3009	91213387 (6017, 6018)	Novel Protein sim. GBank g14927370[gb]AA033084 (JAF06797 - (AF067972) DNA cytosine methyltransferase 3 alpha [Homo sapiens])	Contains protein domain (PF01823) - Protein of unknown function	52646842, 56182575, 22278995, 22278998, 264259, 29331825, 29331826, 29331827, 29331828, 35696032, 264508, 264509, 264907, 56182435, 264511, 265007, 264512, 265008, 264757, 264758, 55812038, 264759, 33109954, 21906754, 265010, 265011, 264600, 265017, 265018, 265019, 264780, 18108351, 264288, 264369, 21906764, 21906765, 21906767, 55811957, 265020, 265021, 264691, 18108368, 27486262, 20281149, 18108370, 55811576, 264637, 264556, 264557, 18108381, 264558, 56182323, 264559, 18108385, 18108388, 22279002, 264486
3010	95317217 (6019, 6020)	Novel Protein sim. GBank g14927370[gb]AA033084 (JAF06797 - (AF067972) DNA cytosine methyltransferase 3 alpha [Homo sapiens])	Contains protein domain (PF01823) - Protein of unknown function	264695, 264687, 21906767, 21906769, 55811957, 22278995, 35695917, 22278996, 22278997, 265020, 265021, 60170615, 264692, 33657023, 29331822, 264693, 18108364, 29331824, 33657109, 60432289, 29331827, 27486261, 29331828, 264508, 264909, 55811576, 35695955, 265008, 264556, 60433438, 63373044, 18108387, 65274727, 60432113, 265017, 22279000, 265019, 264584, 264682, 264764
3011	94323597 (6021, 6022)	Novel Protein sim. GBank g15052319[gb]AA038501 (JAF11883 - (AF118838) citrin; adult-onset type II citrullinemia protein [Homo sapiens])	Contains protein domain (PF00153) - Mitochondrial carrier proteins	35696032, 56184335, 264758, 21906754, 265018, 264760, 264782, 18108351, 264682, 264448, 21906766, 65274620, 18108374, 264482, 264584
3012	87753087 (6023, 6024)		UNCLASSIFIED	263972

3013	91238799 (6025, 6026)	Novel Protein sim. GBank g13702286 (AC005787) - H33374_1 [Homo sapiens]	Contains protein domain (PF00400) - WD domain, C-beta repeat	transcript factor	264488, 263994, 35696286, 22278997, 264259, 29331824, 60424289, 60714117, 35696062, 264905, 264906, 264907, 264908, 264909, 56182435, 264511, 264512, 264910, 264591, 264592, 264593, 264594, 33657402, 60433438, 264595, 264596, 55812038, 264758, 33109954, 21906754, 265010, 265018, 264604, 264760, 264682, 264683, 264764, 264369, 264288, 264765, 264766, 264686, 264768, 264687, 21906767, 35695917, 265020, 33657023, 264692, 264693, 33657109, 264628, 264629, 55811576, 35696423, 35695855, 264630, 264631, 264632, 264634, 264635, 264636, 264637, 264638, 264639, 83373044, 264563, 264565, 264566, 264567
3014	7867763 (6027, 6028)	Novel Protein sim. GBank g13373374 (mbljCAA93081) - (Z68879) Similarity to Yeast Ch12p protein (PIR Acc. No. S5443); cDNA EST EMBL:D7950 comes from this gene; cDNA EST EMBL:D7949 comes from this gene; cDNA EST EMBL:D33447 comes from this gene; cDNA EST EMBL:D33316 comes from...		ATPase-associated	264760
3015	8695468 (6029, 6030)				22278995, 22278996, 22278997, 264259, 29331824, 29331828, 264908, 265007, 265008, 264910, 265011, 265017, 265019, 264691, 33657109, 18108370, 35695855, 264556, 264564
3016	8775945 (6031, 6032)	Novel Protein sim. GBank g1168819 (p14733CC9)_YEAST - CELL DIVISION CONTROL PROTEIN 91		UNCLASSIFIED	52644507, 52648842, 56994075, 52645080, 29331822, 29331824, 35696052, 33656970, 52644045, 264596, 33657084, 265017, 265019, 52644229, 21906767, 35695917, 52644150, 33657023, 33657109, 27486261, 27486262, 27486264, 33657349, 27486265, 35695763, 35695855, 17168518
3017	95011154 (6033, 6034)	Novel Protein sim. GBank g1458958 (djbBAAT6851.1) - (AB023224) KIAA1007 protein [Homo sapiens]			264488, 18108397, 22278996, 35696286, 22278999, 264259, 29331822, 60432289, 264908, 29331830, 264909, 56182435, 265006, 265007, 265008, 265009, 264591, 60433356, 60433438, 52646317, 21906754, 55811386, 265010, 265011, 87168559, 265017, 265018, 265019, 264288, 264687, 21906765, 21906766, 21906767, 21906769, 265020, 265022, 65274620, 52645129, 33657109, 33657182, 18108370, 263972, 18108374, 264631, 52644332, 83373044, 18108385, 18108388, 56526486, 87168518, 264404, 60432113, 22278990, 264567

3018	11073891 (6035, 6036)	Novel Protein sim. GBank glij219332 (AC004020) - Unknown gene product [Homo sapiens]		264558	264565, 52644507, 18108394, 65274572, 56192575, 22278994, 22278995, 56994075, 22278996, 22278999, 264259, 29331822, 29331824, 60432289, 29331827, 264908, 56192435, 265007, 265009, 60432229, 264993, 60433356, 55812038, 21900754, 87168474, 265011, 87168559, 265017, 265018, 265019, 264681, 18108351, 264448, 264682, 264683, 18108354, 264685, 264687, 264689, 21900766, 21900768, 21900769, 2644150, 264680, 264691, 33657023, 264692, 264693, 33657109, 52645129, 33657349, 264629, 65274791, 264634, 52644332, 56182323, 18108385, 87168518, 22279000, 22279002, 264563
3019	94148231 (6037, 6038)	Novel Protein sim. GBank glij219332 (AC004020) - Unknown gene product [Homo sapiens]		oncogene	264488, 263994, 35696286, 264259, 264508, 264805, 264509, 264906, 264907, 264908, 264909, 264510, 264910, 60174639, 264600, 264603, 264760, 264762, 264682, 264763, 264764, 264288, 264389, 264766, 264687, 264688, 264769, 55811957, 35695917, 33657023, 264628, 35696423, 35695955, 264630, 264632, 264634, 264635, 264636, 264637, 264556, 264557, 264638, 264639, 83373044, 18108385, 264564, 264567, 264468
3020	94318251 (6039, 6040)	Novel Protein sim. GBank glij414809 (AF061529) - <i>rip</i> [Mus musculus]	Contains protein domain (PF00415) - ATPase, associated Regulator of chromosome condensation (RCC1)		264259, 29331826, 29331828, 264288, 264566
3021	80478512 (6041, 6042)	Novel Protein sim. GBank glij880899 (emb) (CAB05005) - (Z85559) cDNA EST yk23644.5 comes from this gene; cDNA EST EMBL C13455 comes from this gene; cDNA EST yk329g6.5 comes from this gene; cDNA EST CEMSH45R comes from this gene [Caenorhabditis elegans]		UNCLASSIFIED	264488, 22278995, 35696286, 22278997, 29331826, 35696032, 264907, 29331830, 52640405, 56182435, 60432229, 264592, 60433356, 60433438, 264689, 21900767, 55811957, 35695917, 265021, 18108376, 263978, 264635, 264556, 22279000
3022	87718500 (6043, 6044)	Novel Protein sim. GBank glij56922 (p32323JAGA) - YEAST - A-AGGLUTININ ATTACHMENT SUBUNIT PRECURSOR	Contains protein domain (PF00614) - Phospholipase D. Active site motif	UNCLASSIFIED	60432049, 264760, 21900769, 55811957, 35695917, 264690, 264555, 264559, 264593, 55811576
3023	95305484 (6045, 6046)	Novel Protein sim. GBank glij56922 (p32323JAGA) - YEAST - A-AGGLUTININ ATTACHMENT SUBUNIT PRECURSOR		UNCLASSIFIED	
3024	86675305 (6047, 6048)	Novel Protein sim. GBank glij295671 (L11275) - selected as a weak suppressor of a mutant of the subunit AC40 of DNA dependent RNA polymerase I and III [Saccharomyces cerevisiae]		UNCLASSIFIED	
3025	65706629 (6049, 6050)	Novel Protein sim. GBank glij295671 (L11275) - selected as a weak suppressor of a mutant of the subunit AC40 of DNA dependent RNA polymerase I and III [Saccharomyces cerevisiae]		UNCLASSIFIED	

3026	87643862 (6051, 6052)	Novel Protein sim: GBank gii024052[pp197924][KARI_RAT - KALIRIN (PAM COOH-TERMINAL INTERACTOR PROTEIN 10) (P-CIP10)]		UNCLASSIFIED	22278996, 22278997, 264480, 29331825, 264111, 265007, 60170831, 265010, 87188559, 265019, 21906765, 29148627, 263987, 20281149, 20281069, 263975, 263977, 20281071, 56526486, 22279000
3027	94844563 (6053, 6054)	Novel Protein sim: GBank gii029647[gbIAAD34084.1][AF151847] CGI-89 protein [Homo sapiens]	Contains protein domain (PF01529) - DHH zinc finger domain	UNCLASSIFIED	18108394, 22278995, 22278996, 35696286, 22278997, 22278998, 60430406, 264259, 29331822, 29331824, 60714117, 29331825, 60432289, 29331826, 29331827, 29331828, 35696052, 264905, 264907, 29331830, 264908, 264909, 264510, 265007, 265008, 265009, 264910, 33657402, 264596, 21906754, 265010, 265011, 87168559, 264600, 265018, 18108351, 264682, 264683, 264764, 264288, 264685, 264687, 264769, 264689, 21906765, 21906766, 21906767, 21906768, 21906769, 29148629, 35695917, 265020, 265021, 265022, 52644150, 264692, 33657023, 264693, 52645129, 33657109, 27486281, 18108374, 55811576, 35696423, 65274791, 264636, 264556, 264557, 264638, 60170394, 264639, 264558, 83373044, 18108385, 56526486, 22279000, 22279002
3028	94231897 (6055, 6056)	Novel Protein sim: GBank gii08052[1emb][CAA18650] - (AL022599) hypothetical protein [Schizosaccharomyces pombe]	Contains protein domain (PF04000) - WD domain, G-beta repeat	UNCLASSIFIED	22278995, 22278996, 22278997, 22278998, 264259, 29331824, 29331827, 35696052, 264908, 265007, 265008, 265009, 60170831, 21906754, 265011, 87168559, 265018, 264762, 264683, 264765, 264689, 21906765, 21906768, 21906769, 29148629, 35695917, 265021, 265022, 33657109, 27486285, 264628, 264629, 18108374, 35696423, 35695855, 264638, 60170394, 22279000, 22279002, 264482, 264564
3029	87619284 (6057, 6058)			UNCLASSIFIED	22278997, 22278999, 29331827, 264905, 264509, 264909, 264510, 264511, 264512, 87168474, 265019, 18108351, 21906768, 264534, 264690, 264693, 263969, 18108370, 264558, 22279000, 22279002, 264482
3030	87544828 (6059, 6060)	Novel Protein sim: GBank gii075776[1emb][CAA18782] - (AL022727) dJ8019.1 (olfactory receptor-like protein [hsM1-1]) [Homo sapiens]	Contains protein domain (PF00001) - 7 transmembrane receptor (rhodopsin family)	im7	22278995, 22278997, 22278998, 22278999, 264259, 29331822, 29331824, 29331826, 29331827, 29331828, 35696052, 264908, 265018, 21906765, 21906766, 21906767, 21906768, 265021, 263974, 18108374, 264558, 56526486, 22279000, 22279002
3031	91677953 (6061, 6062)	Novel Protein sim: GBank gii430567[gbIAAD22105.1] - (AF132000) TADA1 protein [Homo sapiens]		UNCLASSIFIED	

3032	94130124 (6043, 6064)	Novel Protein sim. GBank gi1019951 (U37429) - similar to M. musculus MERG and other AHCPTSA proteins [Caenorhabditis elegans]	Contains protein domain (PF00534) - Glycosyl transferases group 1	22278996, 35696286, 264259, 29331824, 29331828, 264907, 29331830, 264758, 33109954, 87168474, 87168559, 265019, 264288, 21900769, 265021, 264693, 35696423, 35695855, 264636, 56182323, 83373044, 87168518
3033	95308321 (6085, 6086)	Novel Protein sim. GBank gi15031573 (p1NP_005712.1) pACTR - ARP3 actin-related protein 3, yeast) homolog	Contains protein domain (PF00022) - Actin	35696286, 264259, 29331826, 35696052, 264508, 264905, 264906, 264907, 264908, 264909, 265008, 264951, 21900754, 265010, 265019, 264681, 264369, 264768, 21900764, 21900768, 35695917, 33657023, 264528, 35695855, 264632, 264635, 264639, 264482, 264563
3034	80415373 (6087, 6088)		UNCLASSIFIED	264906, 264907, 264510, 264592, 265010, 264752, 264766, 264637, 264638, 264486
3035	91220692 (6089, 6070)	Novel Protein sim. GBank gi13738207 (emb)CA2312821 - (AL031853) conserved ATP-GTP binding protein [Schizosaccharomyces pombe]	UNCLASSIFIED	264636
3036	91718323 (6071, 6072)	Novel Protein sim. GBank gi17283759 (p3919)ALU7_HUMAN - IIII ALU SUBFAMILY SQ WARNING ENTRY IIII (AF131766) Similar to Era-VASP like protein [Homo sapiens]	kinase	264907, 33657402, 265021
3037	95307434 (6073, 6074)	Novel Protein sim. GBank gi1406590 (gi)AD200401 - (AF131766) Similar to Era-VASP like protein [Homo sapiens]		265017
3038	85421807 (6075, 6076)	Novel Protein sim. GBank gi15360053 (gi)AD2865.1 (AF15509) NY-REN 18 antigen [Homo sapiens]	Contains protein domain (PF00627) - UBA domain	22278996, 22277697, 264259, 264905, 265007, 265009, 60433356, 21900754, 265018, 265019, 18108351, 264687, 21900765, 265020, 265021, 65274620, 27486282, 264636, 56182323, 18108385, 22279000
3039	87332257 (6077, 6078)	Novel Protein sim. GBank gi14751728 (emb)CA842094.1 - (AJ238717) ZRP protein [Rattus norvegicus]	UNCLASSIFIED	35696286, 29331828, 264109, 264110, 264511, 265007, 21900754, 265011, 264681, 264683, 264687, 21900768, 264691, 18108370, 263972, 264629, 18108374, 263977, 35696423, 264564, 18108391, 264692, 264558, 18108352, 18108385, 264567
3040	90933517 (6079, 6080)	Novel Protein sim. GBank gi4884278 (emb)CA843247.1 - (AL050037) hypothetical protein [Homo sapiens]	UNCLASSIFIED	56994075, 22277697, 22278998, 29331827, 33656970, 33109954, 21900754, 87168559, 264600, 264683, 21900765, 21900768, 22279002
3041	86312357 (6081, 6082)	Novel Protein sim. GBank gi13876073 (emb)CA804122.1 - (281509) similar to Zinc finger, C3HC4 type (RING finger); cDNA EST EMBL D28025 comes from this gene; cDNA EST EMBL D28024 comes from this gene; cDNA EST EMBL D33210 comes from this gene; cDNA EST EMBL D33441 comes from this ...	UNCLASSIFIED	
3042	86749402 (6083, 6084)	Novel Protein sim. GBank gi1790236 (U21156) - sarcolateral associated protein 2 [Oryctolagus cuniculus]	glycoprotein	264636

3043	87773026 (6085, 6086)	Novel Protein sim. GBank, gi 85405 emb CAA58337 - (X63413) U88 [Human herpesvirus 6]		UNCLASSIFIED	35696286, 60424269, 35696052, 264508, 264905, 66712502, 56182435, 55811385, 52644286, 55811150, 35695917, 60170615, 33857109, 18108374, 264634, 60431850, 22278986, 22278998, 22278998, 29331824, 56182435, 264511, 265007, 60170831, 60432229, 60433356, 33109954, 18108351, 264288, 35695917, 18108368, 18108370, 60170394
3044	87645182 (6087, 6088)	Novel Protein sim. GBank, gi 4104922 (AF42276) - α251 homolog [Pseudomonas putida]		Contains protein domain (PF01209) - glycoprotein ubtE/CODS methyltransferase family	22278986, 22278998, 22278998, 29331824, 56182435, 264511, 265007, 60170831, 60432229, 60433356, 33109954, 18108351, 264288, 35695917, 18108368, 18108370, 60170394
3045	94127588 (6089, 6090)	Novel Protein sim. GBank, gi 4588640 jgi BAAT76859.1 - (AB023232) KIAA1015 protein [Homo sapiens]		Contains protein domain (PF00066) - Zinc finger, C2H2 type	264488, 264259, 35696052, 264508, 264905, 264509, 264906, 264907, 264909, 264511, 265006, 264591, 264593, 33109954, 264604, 264764, 264683, 264288, 264766, 264768, 21906765, 21906768, 55811957, 35695917, 27486262, 18108370, 264628, 18108374, 35695985, 264630, 264632, 264635, 264563, 264564, 264565
3046	8808247 (6091, 6092)			UNCLASSIFIED	22278989, 29331822, 29331824, 29331825, 29331826, 60432289, 29331827, 29331828, 264906, 52646317, 55811957, 60432113, 22279000, 22279002, 264482, 264564
3047	95089924 (6093, 6094)			UNCLASSIFIED	264488, 22278986, 22278997, 22278998, 29331824, 29331825, 56182435, 264511, 265008, 265009, 265011, 265017, 264766, 21906768, 21906769, 35695917, 52644150, 33857349, 65274791, 35695955, 264555, 60432113, 22279000, 264566
3048	87629419 (6095, 6096)	Novel Protein sim. GBank, gi 4588034 gb A025962.1 AF092878 (AF092878) zinc RING finger protein SAG [Homo sapiens]		Contains protein domain (PF00097) - Zinc finger, C3HC4 type (RING finger)	264102, 29148784
3049	86229955 (6097, 6098)	Novel Protein sim. GBank, gi 545415 jgi NP_066286.1 pVARS - vally-IRNA synthetase 1		Contains protein domain (PF01406) - IRNA synthetases class I (C)	22278987, 29331826, 264607, 264758, 87168559, 265018, 264448, 21906768, 265020, 33857109, 35695955, 60432113, 22279000
3050	87643679 (6099, 6100)	Novel Protein sim. GBank, gi 4588642 jgi BAAT76843.1 - (AB023216) KIAA0999 protein [Homo sapiens]		Contains protein domain (PF00069) - Eukaryotic protein kinase domain	264259, 29331825, 264909, 265007, 264512, 265019, 264288, 21906766, 265020, 264693, 18108385, 56526486, 87168518, 22279002, 264566
3051	87750589 (6101, 6102)				22278997, 264595, 265019, 264288, 264693, 87168518
3052	57108030 (6103, 6104)	Novel Protein sim. GBank, gi 117528 sp P14755 CRYL_RAB1 - LAMBDA-CRYSTALLIN		dehydrogenase	264534

3053	95350373 (6105, 6108)	Novel Protein sim. GBank g1394781j08[CAG19465.1] - (AL023828) cDNA EST EMBL M89008 comes from this gene. cDNA EST yk22923.3 comes from this gene [Caenorhabditis elegans]		UNCLASSIFIED	65274572, 56181686, 22276995, 35686286, 22276998, 264259, 60432267, 265008, 265009, 60433438, 2196754, 265010, 97166599, 264603, 263016, 263019, 264763, 264764, 264288, 21905765, 21905766, 21905768, 21905769, 35695917, 18108374, 35694423, 264638, 56182323, 22279000, 264563
3054	86943510 (6107, 6108)	Novel Protein sim. GBank g107621j01[JS0755 - hypothetical protein VSP-3 - Chlamydomonas reinhardtii]		UNCLASSIFIED	35662286, 35686052, 29331630, 264488, 264909, 264512, 264910, 265017, 264604, 264766, 265020, 33857109, 264628, 35695955, 264638, 264564, 264566, 264486
3055	95350537 (6108, 6110)	Novel Protein sim. GBank g1468083j01[AD27711.1]AF13294 - (AF132942) COI-08 protein [Homo sapiens]		transport	60424179, 65274572, 36182575, 35686286, 60424289, 60432289, 35696052, 56182435, 265008, 265009, 60170831, 60432229, 60431735, 60433356, 264594, 60433438, 21906794, 55811386, 265011, 97166599, 265019, 18108351, 264683, 264288, 264569, 264688, 21905768, 55811857, 35695917, 90170915, 33857023, 65274620, 33857108, 35695753, 60431526, 18108374, 55810764, 55811576, 35686423, 65274791, 264638, 60431650, 18108381, 36182323, 60170394, 18108385, 60432113, 264564, 264565, 264566
3056	91661636 (6111, 6112)	Novel Protein sim. GBank g172837j01P39194[ALU7_HUMAN - IIII ALU SUBFAMILY SQ WARNING ENTRY IIII]		glycoprotein	224488, 264569, 18108394, 55846842, 22276997, 22276998, 22276999, 264259, 90714117, 29331826, 29331827, 35696052, 264508, 264509, 264905, 264906, 264907, 264908, 264909, 265005, 264512, 265007, 265008, 265009, 264910, 33857402, 55812038, 264596, 264758, 265010, 265011, 265017, 265019, 264760, 18108351, 264762, 264763, 264764, 264288, 264765, 264697, 18108357, 264768, 264769, 264689, 21905765, 21905766, 21905767, 21905768, 21905769, 35695917, 265020, 265021, 264991, 264993, 33657109, 18108370, 264628, 264629, 18108374, 55811576, 35695423, 35695955, 264630, 264631, 264632, 264634, 264635, 264636, 264637, 264638, 18108381, 83373044, 18108385, 22279000, 22279002, 264563, 264564, 264595, 264596, 264486, 264597

3057	95412746 (6113, 6114)	Novel Protein sim. GBank gji3978119[emb]CA888901 - (Z49068) similar to GTP-binding protein, cDNA EST EMBL.M89111 comes from this gene. cDNA EST EMBL.D277709 comes from this gene. cDNA EST EMBL.D277709 comes from this gene. cDNA EST EMBL.D73788 comes from this gene. cDNA EST Y4353....		struct	264508, 264905, 264907, 264908, 264909, 264510, 264512, 264910, 264592, 264594, 264787, 18108374, 264635, 264555, 264637, 264639, 264563, 264564, 264565, 264486
3058	79646226 (6115, 6116)	Novel Protein sim. GBank gji458803[gb]AA025962. JAF09287 - (AF092878) zinc RING finger protein SAG [Homo sapiens]	Contains protein domain (PF00097) - Zinc finger, C3HC4 type (RING finger)	UNCLASSIFIED	264683
3059	87659425 (6117, 6118)	Novel Protein sim. GBank gji458803[gb]AA025962. JAF09287 - (AF092878) zinc RING finger protein SAG [Homo sapiens]		UNCLASSIFIED	22278995, 22278996, 22278997, 22278998, 22278999, 264480, 264259, 29331824, 29331825, 29331827, 35696052, 29331828, 265007, 60433438, 265017, 265018, 265019, 264681, 264448, 264288, 264788, 21906765, 21906766, 21906767, 21906769, 29148629, 29148784, 265022, 52644150, 18108370, 264636, 18108385, 264563, 264567
3060	79346691 (6119, 6120)			UNCLASSIFIED	264567
3061	87740864 (6121, 6122)			UNCLASSIFIED	264112, 52644286, 21906768, 33657023, 263974, 18108385
3062	87619465 (6123, 6124)	Novel Protein sim. GBank gji445690[gb]AA0209631 - (AF070957) glutathione S-transferase subunit 13 homolog [Homo sapiens]	transferase		264908, 265008, 18108351, 264566
3063	80078023 (6125, 6126)	Novel Protein sim. GBank gji2246532 (U93872) - ORF 73, contains large complex repeat CR 73 [Kaposi's sarcoma-associated herpesvirus]		UNCLASSIFIED	18108359, 264558
3064	91241526 (6127, 6128)	Novel Protein sim. GBank gji4240315[gb]BA74936.1 - (AB020720) KIAA0813 protein [Homo sapiens]	Contains protein domain (PF004003) - Heavy-metal-associated domain	UNCLASSIFIED	52646365, 52648842, 65274572, 26182575, 56181688, 22278995, 22278996, 22278997, 22278999, 264259, 604332049, 29331824, 66714117, 264508, 264907, 264908, 56182435, 265009, 60433229, 60433438, 55812038, 52644286, 265018, 264682, 264288, 264686, 264768, 264687, 52644229, 264689, 21906768, 264691, 264692, 264693, 18108370, 18108377, 55811576, 264636, 56182323, 264558, 264639, 18108385, 22279000, 22279002
3065	91639201 (6129, 6130)	Novel Protein sim. GBank gji565874[gb]AA045980. JAC005066 - (AC005067) Supported by Human EST H08032.1 (NID3g72854), mouse EST AA870042.1 (NID3g965487), and genscan [Homo sapiens]		UNCLASSIFIED	22278996, 22278998, 264093, 264094, 264095, 29331854, 60424289, 66714117, 264100, 264907, 265007, 264591, 60432229, 264593, 265011, 265019, 18108351, 264766, 264767, 21906765, 21906768, 264693, 20281069, 22279000, 22279002, 264482, 264566, 264567

3066	91224437 (6131, 6132)	Novel Protein sim. GBank g 484268 emb CABA3245.1 - (AL050028) hypothetical protein [Homo sapiens]		UNCLASSIFIED	18108397, 22278995, 26694075, 22278996, 264905, 66712502, 265006, 264512, 264910, 264753, 60174639, 264780, 18108351, 264764, 264683, 18108359, 264692, 18108364, 18108368, 18108370, 18108377, 18108379, 60170394, 264567
3067	95422551 (6133, 6134)	Novel Protein sim. GBank g 4688258 p AA027832.1 AF121859 sorting nexin 9 [Homo sapiens]	Contains protein domain (PF00787) - struct PX domain		264488, 264489, 35696286, 22278996, 50994075, 264229, 29331822, 29331825, 35696032, 29331828, 264508, 264905, 264509, 264906, 264907, 264908, 264909, 264112, 264510, 264511, 264512, 265008, 265009, 264910, 264591, 264592, 264593, 264594, 264757, 264595, 264596, 264758, 265010, 265011, 87168559, 264601, 264602, 264603, 264604, 264605, 265019, 264780, 264782, 264448, 264763, 264764, 264288, 264389, 264788, 264789, 264687, 264789, 264689, 21906765, 21906767, 21906768, 35695917, 265020, 265021, 264534, 52844150, 264691, 33657023, 264693, 264628, 60431528, 263977, 35695855, 264630, 264631, 264634, 264835, 264636, 264637, 264638, 264639, 83373044, 56526486, 87168518, 22279000, 22279002, 264563, 264483, 264584, 264585, 264586, 264567, 264486
3068	85360651 (6135, 6136)	Novel Protein sim. GBank g 3878119 emb CAA88860 - (Z49088) similar to GTP-binding protein; cDNA EST	Contains protein domain (PF01926) - struct GTPase of unknown function		22278996, 56994075, 22278998, 22278999, 264259, 264107, 264905, 29331830, 52844045, 264110, 60170831, 264592, 264594, 33657402, 21906754, 33108954, 87168474, 87168559, 265017, 264448, 264764, 264683, 264766, 52644229, 21906765, 21906766, 21906768, 21906769, 60170615, 33657023, 18108370, 18108376, 264634, 264557, 60170394, 56182323, 18108385, 87168518, 22279000, 264482
3069	95412753 (6137, 6138)	Novel Protein sim. GBank g 3878119 emb CAA88860 - (Z49088) similar to GTP-binding protein; cDNA EST EMBL-M89111 comes from this gene; cDNA EST EMBL-D27709 comes from this gene; cDNA EST EMBL-D27708 comes from this gene; cDNA EST EMBL-D73788 comes from this gene; cDNA EST yk353...			

3070	94319173 (6139, 6140)	Novel Protein sim. GBank g1307778[emb](CA1805527) - (Z83110) cDNA EST yk472b5.3 comes from this gene; cDNA EST yk474a7.3 comes from this gene; cDNA EST yk472b5.5 comes from this gene; cDNA EST yk468c10.3 comes from this gene; cDNA EST yk468c10.5 comes from this gene; cDNA EST EM...	synthase	264488, 22278984, 22278995, 22278996, 22278997, 22278998, 22278999, 264459, 56994075, 22278997, 22278998, 22278999, 264459, 29331822, 29147620, 29331824, 26714117, 29331826, 29146498, 29146499, 68712502, 29331830, 52644045, 56182435, 264511, 265007, 264512, 264910, 60170831, 264592, 264758, 33108954, 21906754, 87168474, 265019, 18108351, 284448, 284683, 384288, 52644229, 264689, 21906765, 21906766, 21906767, 21906769, 35695917, 265020, 265021, 60170615, 52644150, 264691, 33657023, 27486261, 27486264, 264628, 18108370, 18108377, 55811576, 35695955, 264634, 264635, 18108381, 60170394, 56182323, 264558, 83373044, 18108385, 18108387, 56526486, 264404, 284553, 264565
3071	94325573 (6141, 6142)	Novel Protein sim. GBank g14502425[ef]NP_001709.1pBMP6 - bone morphogenetic protein 6 precursor	Contains protein domain (PF00085) - TGF Thioredoxin	264488, 65274572, 18108398, 22278996, 22278997, 22278998, 22278999, 264259, 29331822, 66714117, 29331826, 35698052, 29331828, 29146498, 29146499, 264907, 264908, 29331830, 284909, 52644045, 56182435, 265006, 265007, 264512, 265008, 265009, 60170831, 60432229, 264592, 60433356, 33657402, 60433438, 33108954, 52644266, 87168474, 265010, 265017, 264681, 264288, 264685, 264766, 264687, 264769, 264689, 21906765, 21906766, 21906767, 21906768, 21906769, 35695917, 265020, 265021, 265022, 60170615, 52644150, 264690, 264691, 264692, 33657023, 264693, 33657109, 263971, 18108374, 18108377, 35696423, 55811576, 65274791, 35695955, 264630, 264635, 264636, 264557, 60170394, 83373044, 60432113, 22279000, 22279002, 56182575, 29331822, 29331824, 29331825, 29146498, 264908, 52644045, 56182435, 265009, 60433438, 55812038, 18108351, 264683, 264369, 52644229, 52644150, 33657023, 264693, 33657109, 18108374, 55811576, 65274791, 284555, 56182323, 60432113, 264564
3072	95115892 (6143, 6144)	Novel Protein sim. GBank g11263289 (U47856) - fibronin-4 (Araucaria diademata)	transcript factor	56182575, 29331822, 29331824, 29331825, 29146498, 264908, 52644045, 56182435, 265009, 60433438, 55812038, 18108351, 264683, 264369, 52644229, 52644150, 33657023, 264693, 33657109, 18108374, 55811576, 65274791, 284555, 56182323, 60432113, 264564

3073	86147248 (6 145, 6146)	Novel Protein sim. GBank gi134401sp P23228CORE_HUMAN - CORNIFIN B (SMALL PROLINE-RICH PROTEIN [B] (SPR-B)) (14.9 kD PANICORNULIN)		UNCLASSIFIED	264789
3074	86009351 (6 147, 6148)	Novel Protein sim. GBank gi134401sp P23228CORE_HUMAN - CORNIFIN B (SMALL PROLINE-RICH PROTEIN [B] (SPR-B)) (14.9 kD PANICORNULIN)		UNCLASSIFIED	264488, 265019, 264448, 264288, 21906767, 264693, 18108368, 18108370, 18106374, 264567
3075	86009352 (6 148, 6150)	Novel Protein sim. GBank gi1455739g P000466.1pBARD - BRCA1 associated RING domain 1	Contains protein domain (PF00023) - Ank repeat	homeobox	264509, 264907, 264689, 264693, 56526486
3076	87819219 (6 151, 6152)	Novel Protein sim. GBank gi1302395g P000808HET1_PODAN - VEGETATIBLE INCOMPATIBILITY PROTEIN HET-E-1		UNCLASSIFIED	18108398, 29331822, 29331827, 60432229, 265017, 264691, 264693
3077	86742771 (6 153, 6154)	Novel Protein sim. GBank gi1302395g P000808HET1_PODAN - VEGETATIBLE INCOMPATIBILITY PROTEIN HET-E-1	Contains protein domain (PF00400) - WD domain, G-beta repeat	kinase	65274572, 35699052, 264511, 60170831, 87168474, 264369, 3569917, 33657182, 27486264, 33657349, 35699763, 35699555, 264639
3078	86009355 (6 155, 6156)	Novel Protein sim. GBank gi13000850 (AC004994) - similar to KIAA0600; similar to d1028-456 (PID:3043724) [Homo sapiens]			22279002
3079	87821883 (6 157, 6158)	Novel Protein sim. GBank gi3875410g P000808HET1_PODAN - VEGETATIBLE INCOMPATIBILITY PROTEIN HET-E-1		transport	29331824, 29331826, 264758, 55811368, 265017, 55811180, 52644229, 21906768, 265020, 265021, 264693, 18108376, 264631, 52644332, 22279002
3080	95298274 (6 159, 6160)	Novel Protein sim. GBank gi1525722 P000808HET1_PODAN - VEGETATIBLE INCOMPATIBILITY PROTEIN HET-E-1		interferon	264488, 52644507, 22278996, 22278998, 264490, 264259, 29331824, 60174117, 29331825, 29331826, 29331827, 29331828, 29146499, 264508, 264905, 264828, 52644045, 56182435, 265006, 264591, 264596, 21906754, 60174639, 265010, 264692, 264448, 264763, 264693, 264764, 264288, 264685, 264769, 264688, 264689, 21906765, 21906767, 21906769, 55811957, 35699517, 265020, 60170615, 52644150, 264692, 33657023, 264693, 65274620, 33657109, 27486261, 35699763, 264628, 18108370, 65274791, 264558, 56182323, 60170394, 264482, 264565, 264484
3081	86004864 (6 161, 6162)	Novel Protein sim. GBank gi172831sp P39188ALU1_HUMAN - IIII ALU SUBFAMILY J WARNING ENTRY IIII		UNCLASSIFIED	18108398, 264509, 264905, 264906, 264907, 264908, 264909, 264510, 265011, 265018, 264910, 264595, 264758, 265011, 265018, 264760, 264761, 264763, 264764, 18108354, 264685, 264766, 264628, 264629, 264630, 264631, 264632, 264634, 264555, 264556, 264638, 18108382, 18108385, 264563, 264565, 264566
3082	80310121 (6163, 6164)				264764, 55811957, 264555, 264564

3083	88035725 (6165, 6166)	Novel Protein sim. GBank gij688241 (U29488) - C56C10.3 gene product [Caenorhabditis elegans]	UNCLASSIFIED	264488, 264259, 29331824, 264106, 265008, 264591, 264592, 21906754, 264288, 264767, 21906768, 21906769, 29148784, 264691, 264632, 22279000
3084	87448568 (6167, 6168)	Novel Protein sim. GBank gij47674iprjA37475 - probable structural component p38 - borna disease virus	UNCLASSIFIED	22278995, 60432289, 35696052, 264905, 264906, 264907, 264908, 264909, 264906, 264910, 264593, 264595, 264758, 264369, 264288, 264766, 35695917, 265020, 18108374, 35696423, 264631, 264556, 264555, 264556, 264567, 264486
3085	87795781 (6168, 6170)	Novel Protein sim. GBank gij2565057 (U80741) - CAGH44 [Homo sapiens]	UNCLASSIFIED	265011, 264681
3086	87769842 (6171, 6172)	Novel Protein sim. GBank gij3894189 (AC005602) - hypothetical protein [Xenopus laevis]	UNCLASSIFIED	22278998, 264092, 264259, 29331822, 29331825, 264108, 264112, 18108351, 264687, 263967, 263974, 55810764, 263981, 18108365, 264487
3087	87462888 (6173, 6174)			52646365, 56994075, 22278997, 22278998, 29331824, 29331825, 35696052, 6043438, 33109954, 21906754, 52646317, 265017, 264682, 264369, 264684, 21906767, 21906768, 265020, 264691, 33657023, 33657109, 52645129, 33657182, 27486262, 35695655, 87768518
3088	91224441 (6175, 6176)	Novel Protein sim. GBank gij355304 (AF001549) - Unknown gene product [Homo sapiens]	UNCLASSIFIED	264591
3089	95361242 (6177, 6178)	Novel Protein sim. GBank gij4689146ipb/AA027782.1(AE07704) lambda-crystallin [Homo sapiens]	Contains protein domain (PF00725) - dehydrogenase 3-hydroxacyl-CoA dehydrogenase	18108397, 65274572, 56182575, 36181886, 56994075, 35696286, 22278997, 22278998, 264259, 29331824, 29331825, 29331826, 29331828, 264907, 29331830, 264909, 56182435, 264510, 265007, 60170831, 6043229, 21906754, 55811386, 265017, 265018, 265019, 264760, 55811150, 264288, 264766, 56181562, 21906765, 21906766, 21906767, 21906768, 265021, 60170615, 27486262, 18108370, 60431528, 35696423, 264556, 264559, 60432113, 264486

3090	95342371 (6179, 6180)	Novel Protein sim. GBank g[i](354050 [U47024] - MEM3 [Mus musculus])	UNCLASSIFIED	60424179, 52645186, 65274572, 36182575, 56181688, 22278995, 35696286, 56994075, 22278996, 22278998, 22278999, 264259, 29331822, 56182181, 29331824, 29331825, 29331826, 29331827, 29331828, 35696052, 33656970, 264906, 264908, 52644045, 264828, 265006, 265007, 265008, 60170831, 60432229, 60433356, 33657402, 55812038, 264758, 21906754, 33109954, 52646317, 55811386, 52644296, 87168474, 265011, 87168559, 265017, 265018, 265019, 55811150, 18108351, 264681, 264448, 264288, 264389, 18108357, 264788, 52644229, 56181562, 21906754, 21906765, 21906766, 21906767, 21906768, 21906769, 35655917, 265020, 265022, 60170815, 264690, 52644150, 264691, 33657023, 18108365, 65274620, 33657109, 18108368, 33657182, 27486261, 27486265, 35695763, 18108374, 18108378, 55810784, 35696423, 55811576, 65274791, 35695855, 264557, 56182323, 83373044, 18108387, 18108388, 87168518, 22278000, 22279002, 284583, 264482
3091	95317424 (6181, 6182)	Novel Protein sim. GBank g[i](873932[jmb]CAB01859) - (Z79596) Similarity to Bovine aspartyl beta hydroxylase (TFR.G162694); cDNA EST EMBL.D27916 comes from this gene; cDNA EST EMBL.D27915 comes from this gene; cDNA EST EMBL.D64881 comes from this gene; cDNA EST EMBL.D68139 comes f.....	UNCLASSIFIED	35696286, 26331822, 35696052, 264508, 264509, 264905, 264906, 264908, 264909, 264510, 264758, 265010, 265011, 264683, 264685, 264766, 264768, 264769, 264683, 264628, 35696433, 35695855, 264632, 264635, 264639, 264482, 264563, 264486

3092	95314532 (6183, 6184)	Novel Protein sim. GBank gi 170758 sp P1580 RS2, HUMAN - 40S RIBOSOMAL PROTEIN S2 (S4) (LRIF3 PROTEIN)	Contains protein domain (PF00333) - ribosomal prot Ribosomal protein S5	264488, 60242176, 18103396, 22278995, 5694075, 22278996, 35686286, 22278997, 22278998, 60432049, 264259, 29331822, 29331824, 29331825, 29331826, 29331827, 35696052, 29331828, 29146498, 29146499, 264508, 264509, 264905, 264906, 264907, 29331830, 264908, 264909, 2644113, 264510, 264511, 265006, 264512, 265007, 265008, 264910, 265009, 60170831, 264591, 264592, 60431735, 264593, 264594, 60433438, 264595, 264758, 21906754, 265010, 265011, 264601, 264602, 265017, 264603, 264604, 265018, 264605, 265019, 264760, 264762, 264681, 18108351, 264763, 264682, 264448, 264754, 264683, 264288, 264369, 264765, 264756, 264686, 264767, 264687, 264768, 264769, 264688, 21906764, 264689, 21906765, 21906766, 21906767, 21906768, 21906769, 29148629, 29148784, 35655917, 265020, 265021, 264534, 60170615, 264690, 264691, 264692, 65274620, 33657109, 27486292, 264628, 264629, 18108374, 263978, 18108377, 35696423, 264630, 264631, 264632, 264634, 264635, 264555, 264636, 264637, 264556, 264638, 264557, 264558, 264639, 80170394, 18108385, 264259, 29331824, 35696052, 264905, 265006, 60432229, 60431735, 264684, 264369, 264288, 264766, 21906767, 35696423, 83337044, 18108385
3093	94318457 (6185, 6186)	Novel Protein sim. GBank gi 5002587 emb CAB44347.1 - (Y17454) LSFRT protein [Homo sapiens]	UNCLASSIFIED	
3094	94316675 (6187, 6188)	Novel Protein sim. GBank gi 400734 sp P31044 FBP_RAT - PHOSPHATIDYLETHANOLAMINE-BINDING PROTEIN (23 KD MORPHINE-BINDING PROTEIN) (P23K)	Contains protein domain (PF01161) - collagen Phosphatidylethanolamine-binding protein	284511, 264763, 264288, 264767, 265022, 264691, 264693, 65277791, 56182323, 264564, 264565

3095	94848162 (6189, 6190)	Novel Protein sim. GBank g i487759 gb AA031421.1 AF12444 - (AF12444) MAGE tumor antigen D1 [Homo sapiens]	Contains protein domain (PF01454) - MAGE family	UNCLASSIFIED	18108397, 5618575, 22278995, 35666286, 56994075, 22278997, 22278998, 264459, 60432049, 66714117, 29331825, 60432289, 35696052, 33656970, 29146498, 264508, 264905, 264509, 29331830, 264909, 264510, 264511, 264512, 265007, 265008, 265009, 60170831, 264758, 21906754, 85658542, 265010, 265011, 87166559, 265017, 265018, 265019, 264760, 264681, 264682, 264683, 264784, 264369, 264288, 264686, 264768, 264789, 264689, 21906765, 21906766, 21906767, 55811957, 35695917, 265020, 265021, 265022, 52644150, 264691, 264692, 33657023, 264693, 263972, 18108376, 55811578, 35696423, 264692, 60170394, 264639, 83373044, 18108385, 18108387, 65274727, 87166518, 60432113, 264482, 264563, 264564, 264565, 264487, 18103391
3096	87735128 (6191, 6192)	Novel Protein sim. GBank g i388222 db BAA34470.1 - (AB018293) KIAA0750 protein [Homo sapiens]	Contains protein domain (PF00307) - stnct Calponin homology (CH) domain	UNCLASSIFIED	22278995, 22278996, 22278997, 22278998, 29331824, 29331825, 29331826, 29331827, 33656970, 264905, 264908, 265008, 264910, 33657402, 265011, 265017, 265018, 264369, 21906766, 21906767, 21906768, 35695917, 265020, 60170615, 264691, 264692, 264693, 27486261, 27486262, 18108370, 60431528, 264634, 264636, 264639, 22279000, 264566
3087	8824895 (6193, 6194)	Novel Protein sim. GBank g i44628 jemb CAB37981 - (AL022395) 4J273N12.1 (PUTATIVE protein based on EST matches) [Homo sapiens]	Contains protein domain (PF00646) - F-box domain.	UNCLASSIFIED	264488, 29331822, 29331825, 60432289, 29331826, 35696052, 29331828, 29331830, 264594, 55812038, 33109954, 33657084, 87168474, 87166559, 52644229, 21906765, 21906767, 18108376, 35696423, 52644332, 264638, 60432113, 22279002
3088	80256024 (6195, 6196)	Novel Protein sim. GBank g i303603 db BAA02145.1 - (D12621) cytochrome P-450LTV [Homo sapiens]	cyto450	UNCLASSIFIED	264488, 35696286, 29331822, 29331824, 29331825, 29331827, 265007, 265008, 265010, 265011, 265018, 265019, 18108357, 21906766, 265020, 265022, 55811576, 56182323, 22279002, 264563
3100	87602421 (6199, 6200)	Novel Protein sim. GBank g i108376 ipr I48013.1 - prolins-rich proteoglycan 2 precursor, parotid - rat	UNCLASSIFIED	UNCLASSIFIED	29331825, 60432289, 35696055, 264910, 60432289, 264592, 264288, 264693, 263987, 264635
3101	79602134 (6201, 6202)		UNCLASSIFIED	UNCLASSIFIED	264906, 264693, 264628, 264630, 264632

3102	91220892 (6203, 6204)	Novel Protein sim. GBank gl(5305706)gb(AAD41781.1)/AF128533 cytoplasmic phosphoprotein PACSIN2 [Homo sapiens]	Contains protein domain (PF00018) - SH3 domain	154969286, 22278996, 22278999, 26331827, 35696052, 264909, 264512, 285008, 60170831, 60433556, 33108954, 18108351, 264684, 264689, 1908767, 60170515, 264692, 33657023, 264638, 22279000, 264482, 264564
3103	90938004 (6205, 6206)	Novel Protein sim. GBank gl(484564)sp(P35292)RB17_MOUSE - RAS-RELATED PROTEIN RAB-17	UNCLASSIFIED	35695917, 264565
3104	87340633 (6207, 6208)	Novel Protein sim. GBank gl(5032207)eiNP_005696.1/pTSSC - tumor-suppressing STF cDNA 6	UNCLASSIFIED	264259, 264684, 264532, 33657182, 264558
3105	94148603 (6209, 6210)			22278997, 264259, 26331824, 35696052, 29331828, 264508, 264509, 264903, 264906, 264907, 264908, 264511, 264910, 264591, 264594, 264758, 264760, 264681, 264762, 264764, 264288, 264766, 264768, 264687, 264769, 21906766, 21906768, 35695917, 33657023, 264692, 264693, 264628, 264629, 35695955, 264630, 264631, 264632, 264634, 264635, 264637, 264638, 264639, 83373944, 264404, 22278902, 264563, 264565, 264566, 264486, 264687
3106	95361416 (6211, 6212)	Novel Protein sim. GBank gl(1938574 (U87190) - B0025.2 gene product [Caenorhabditis elegans]		22278996, 22278997, 22278998, 22278999, 264092, 264093, 264094, 29331822, 264906, 264907, 264908, 52944045, 56182435, 264112, 265008, 265009, 55812038, 265017, 265018, 264683, 264686, 264687, 264768, 52944229, 21906765, 21906768, 21906769, 55811957, 285020, 285022, 284690, 52944150, 264692, 264693, 18108370, 18108377, 55811576, 58182323, 18108385, 18108388, 22279000, 264493
3107	95343272 (6213, 6214)	Novel Protein sim. GBank gl(3341441)emb(CAA76851) - (V17794) winged-helix transcription factor [Gallus gallus]		22278995, 22278996, 35696286, 22278997, 22278999, 264091, 264093, 264259, 29331822, 29331825, 29331826, 60432288, 29331827, 29331828, 33656970, 264105, 264512, 265009, 60433556, 60433438, 265011, 265017, 265018, 21906765, 21906766, 21906767, 21906769, 265021, 264691, 33657109, 27486261, 27486265, 18108370, 263972, 18108374, 55811576, 18108385, 55826486, 264482, 264487
3108	87340635 (6215, 6216)	Novel Protein sim. GBank gl(5032207)eiNP_005696.1/pTSSC - tumor-suppressing STF cDNA 6	UNCLASSIFIED	56182433, 264268, 264890, 264564

3109	94319461 (6217, 6218)	Novel Protein sim. GBank glj5002587[em]C4344347.1]- (T77454) [LSRI] protein [Homo sapiens]	Contains protein domain (PF00096) - zinc finger, C2H2 type	struct	364490, 364908, 365007, 364910, 364593, 364893, 364684, 364687, 31905757, 21905768, 364653, 18108370, 264626, 18108374, 364633, 264627, 264620, 364488, 3574577, 22278995, 22278997, 60432049, 604255, 20331822, 20331824, 20331825, 6042395, 20331826, 20331827, 20331828, 364606, 364510, 265006, 265007, 364608, 265008, 60432229, 3057402, 60433365, 26501, 17168569, 264600, 265017, 265018, 265019, 18108351, 264288, 264369, 21906766, 21906767, 21906768, 265020, 6070615, 264693, 6324620, 18108370, 264639, 18108394, 22279000, 264563, 18108390
3110	95090716 (6218, 6220)	Novel Protein sim. GBank glj1076211[pe]S50755 - hypothetical protein VSP-3 - Chlamydomonas reinhardtii	UNCLASSIFIED		264468, 18108398, 6512693, 265017, 265018, 265019, 264448, 21906767, 265020, 33057423, 18108395, 18108396, 35696423, 32644332, 18108395, 18108398
3111	87754512 (6221, 6222)	Novel Protein sim. GBank glj3242231 (U75454) - C2H2 type zinc finger protein [Homo sapiens]	Contains protein domain (PF00096) - zinc finger, C2H2 type	transcription factor	18108397, 22278998, 264359, 20331824, 35696052, 264907, 264757, 60433438, 87168559, 264763, 264448, 18108354, 264288, 21906767, 21906769, 35695917, 264650, 264661, 264682, 264683, 18108365, 18108381, 18108384, 18108385, 18108388, 87168519, 22279000, 22279002
3112	88043639 (6223, 6224)	Novel Protein sim. GBank glj3900848 (A005023) - match to EST_A436117 NID32013436 [Homo sapiens]	Contains protein domain (PF00046) - homeobox	homeobox	18108397, 22278998, 264359, 20331824, 35696052, 264907, 264757, 60433438, 87168559, 264763, 264448, 18108354, 264288, 21906767, 21906769, 35695917, 264650, 264661, 264682, 264683, 18108365, 18108381, 18108384, 18108385, 18108388, 87168519, 22279000, 22279002
3113	88207098 (6225, 6226)	Novel Protein sim. GBank glj2459910 (AF005956) - anon245 [Drosophila yakuba]	Contains protein domain (PF00046) - homeobox	homeobox	18108397, 22278998, 264359, 20331824, 35696052, 264907, 264757, 60433438, 87168559, 264763, 264448, 18108354, 264288, 21906767, 21906769, 35695917, 264650, 264661, 264682, 264683, 18108365, 18108381, 18108384, 18108385, 18108388, 87168519, 22279000, 22279002
3114	79843167 (6227, 6228)	Novel Protein sim. GBank glj496627[pe]A952261.2] - (U97002) similar to acyl-CoA dehydrogenases and epoxide hydrolases, Plan domain PF00441 (Acyl-CoA_0h). Score=57.4, E-value=1.7e-16, N=2, contains similarity to Plan domain PF00702 (hydrolase). Score=57.4, E-value=1e-13, N=1 [C...]	Contains protein domain (PF00702) - hydroxylated dehalogenase-like hydrolase	hydrolase	18108397, 22278998, 264359, 20331824, 35696052, 264907, 264757, 60433438, 87168559, 264763, 264448, 18108354, 264288, 21906767, 21906769, 35695917, 264650, 264661, 264682, 264683, 18108365, 18108381, 18108384, 18108385, 18108388, 87168519, 22279000, 22279002
3115	94117996 (6229, 6230)	Novel Protein sim. GBank glj503222[pe]NP_005678.1[pe]BSC - Williams Beuren syndrome chromosome region 11	transcription factor		60424179, 56182575, 264359, 20331824, 60424269, 25331626, 60712502, 264510, 265007, 60437135, 60433356, 35612036, 35611386, 265019, 264288, 264689, 21906769, 2046691, 33057402, 264693, 60431326, 263974, 60431650, 56182323, 264559, 22279000, 22279002
3116	79642655 (6231, 6232)	Novel Protein sim. GBank glj503222[pe]NP_005678.1[pe]BSC - Williams Beuren syndrome chromosome region 11	UNCLASSIFIED		60424179, 56182575, 264359, 20331824, 60424269, 25331626, 60712502, 264510, 265007, 60437135, 60433356, 35612036, 35611386, 265019, 264288, 264689, 21906769, 2046691, 33057402, 264693, 60431326, 263974, 60431650, 56182323, 264559, 22279000, 22279002
3117	87771288 (6233, 6234)	Novel Protein sim. GBank glj503222[pe]NP_005678.1[pe]BSC - Williams Beuren syndrome chromosome region 11	UNCLASSIFIED		264559, 22279000, 22279002

3118	94655948 (6235, 6236)	Novel Protein sim. GBank gi 380563 emb CA601444.1 - (Z78018) predicted using GeneIndex - similar to serine/threonine kinase; cDNA EST X5353010.5 comes from this gene [Caenorhabditis elegans]	Contains protein domain (PF00008) - EGF-like domain	IgF	52645156, 52646842, 52745752, 56102575, 22278995, 56994075, 22278996, 35696296, 22278997, 22278998, 22278999, 284259, 29331822, 29331824, 66714117, 29331826, 29331827, 35696052, 29331828, 284905, 264908, 29331830, 52644045, 36182435, 264510, 264511, 265007, 265008, 265009, 264757, 52646317, 21906754, 33657084, 52644286, 87168474, 87168559, 265017, 265018, 264605, 265019, 264782, 264448, 264682, 264684, 264288, 264786, 56181562, 21906765, 21906766, 21906768, 21906769, 265020, 265022, 264680, 52644150, 264691, 33657023, 264693, 33657108, 33657349, 264628, 18108370, 60431528, 18108374, 35986423, 65274791, 60170394, 83373044, 87168518, 22279000, 22279002, 264468, 265006, 264288
3119	85726796 (6237, 6238)		Contains protein domain (PF00328) - Histidine acid phosphatase	UNCLASSIFIED	264468, 264509, 264510, 264511, 264512, 264288, 264468
3120	87344040 (6239, 6240)	Novel Protein sim. GBank gi 5019819 gb AAD37863.1 AF143152 putative NADH oxidoreductase complex I subunit [Caenorhabditis elegans]			52644507, 52645156, 52646365, 52646842, 22278994, 56994075, 22278996, 22278999, 264259, 29331824, 29331827, 35696052, 52644045, 265008, 52648317, 87168474, 87168559, 21906765, 52644150, 33657023, 18108374, 264637
3121	94110735 (6241, 6242)	Novel Protein sim. GBank gi 4501877 ref NP_001088.1 pACR1 - acrosin		UNCLASSIFIED	264638
3122	11814528 (6243, 6244)	Novel Protein sim. GBank gi 2439517 AC002653 - putative RHO-ORAC effector protein, 95% similarity to P49205 (P1Dg1345880) [Homo sapiens]	Contains protein domain (PF00780) - CNH domain	UNCLASSIFIED - Kinase	18100392, 29331822, 29331824, 29331825, 264905, 265007, 55812038, 265019, 18100351, 264682, 264288, 264766, 21906764, 21906765, 21906768, 21906769, 55811957, 18100365, 18100366, 27486285, 18100374, 18100381, 18100384, 22279000, 22279002, 264482
3123	86083003 (6245, 6246)			UNCLASSIFIED	264905
3124	87786899 (6247, 6248)	Novel Protein sim. GBank gi 4980326 gb AAD35412.1 AE00171 - (AE001714) oxidoreductase, short chain dehydrogenase/reductase family [Thermotoga maritima]	Contains protein domain (PF00106) - short chain dehydrogenase	UNCLASSIFIED - dehydrogenase	56181686, 264259, 66714117, 60432889, 29331826, 29331827, 264807, 264908, 264828, 265009, 60433356, 33657402, 60433438, 264756, 18100351, 264288, 2948627, 29148628, 33657023, 33657109, 18108352, 56526486
3125	91216607 (6249, 6250)				

3126	95337205 (6251, 6252)			UNCLASSIFIED	22278999, 264490, 264259, 60432049, 29331822, 60432289, 29146498, 52844045, 56182435, 265009, 60433438, 265010, 87168559, 265017, 265018, 55811150, 264763, 264683, 264359, 264685, 29148629, 33657023, 264693, 33657109, 18108374, 55811576, 18108385, 60432113, 22279002, 35696286, 22278996, 22278999, 29331826, 264908, 60433438, 87168559, 264604, 21906765, 21906769, 33657023, 33657349, 264629, 18108374, 18108377, 22279000, 22279002
3127	91639233 (6253, 6254)	Novel Protein sim. GBank g 2828280 emb C1A16694.1 - (AL021687) putative protein [Arabidopsis thaliana]			
3128	87674330 (6255, 6256)	Novel Protein sim. GBank g 3858528 (AF090133) - lin-7A [Rattus norvegicus]			22278996, 264259, 52844045, 265008, 21906754, 265017, 265018, 21906768, 18108376, 18108387, 22279000, 22279002
3129	87758412 (6257, 6258)	Novel Protein sim. GBank g 3135273 (AC003058) - hypophthalmic protein [Arabidopsis thaliana]			56182575, 264259, 29331825, 29331828, 52844045, 56182435, 60433356, 264600, 264682, 264763, 264784, 264389, 264288, 264686, 55811957, 264692, 33657023, 33657109, 60432113, 264654, 264656, 264636
3130	14993960 (6259, 6260)	Novel Protein sim. GBank g 3329465 (AF064553) - NSD1 protein [Mus musculus]			
3131	95351468 (6261, 6262)	Novel Protein sim. GBank g 1846277 (U06138) - telomerase-associated protein TP-1 [Homo sapiens]		UNCLASSIFIED	56182575, 264259, 29331821, 264907, 56182435, 264594, 60433438, 55812038, 33109954, 21906754, 33657084, 87168474, 264448, 264786, 21906769, 55811957, 265020, 265021, 265022, 60170615, 33657023, 33657109, 33657182, 27468261, 33657349, 65274791, 60170394, 56182323, 83373044, 87168516, 264564

3132	95415459 (6263, 6264)	Novel Protein sim. GBank gll680647/gbAAD27713.1 (AF:13293) CGI:03 protein [Homo sapiens]	Contains protein domain (PF00789) UBX domain	Ubiquitin	52644507, 52646842, 52646305, 65374572, 56182575, 22278994, 22278995, 35096286, 5694075, 22278996, 22278997, 22278998, 22278999, 60432049, 52645080, 29331822, 29331824, 29331825, 60432289, 29331826, 29331827, 29331828, 35696052, 264508, 52644045, 56182435, 264910, 60170831, 60432239, 60433356, 33657402, 55812038, 52646317, 21906754, 52644296, 85656542, 87168559, 265017, 265018, 265019, 264448, 264286, 264369, 52644228, 21906785, 21906786, 21906787, 21906788, 21906789, 35695917, 265020, 265021, 60170615, 52644150, 264692, 33657023, 52645129, 33657109, 33657182, 27486261, 27486262, 27486265, 33657349, 35695763, 18108374, 18108378, 55811576, 35695955, 18108385, 18108387, 56528486, 87168518, 60432113, 22279002
3133	87279414 (6265, 6266)	Novel Protein sim. GBank gll4507613/refNP_003738.1 p1INKS - TANKYRASE		polymerase	22278994, 22278996, 264905, 265006, 265007, 87168559, 264780, 21906787, 18108374, 22279000, 22279002, 264583 264593, 264369, 264685, 264628, 264566
3134	84449816 (6267, 6268)	Novel Protein sim. GBank gll1729827 spP54633 ITALA_DICDI - FILOPODIN (ITALIN HOMOLOG)			
3135	85389358 (6269, 6270)	Novel Protein sim. GBank gll3033476 (AF012927) - fibrinogen-binding protein [Streptococcus equi]		struct	22278996, 264095, 26331826, 33657402, 18108348, 263974
3136	84445839 (6271, 6272)	Novel Protein sim. GBank gll82710 p1rj S41092 - probable carrier protein c2 - Caenorhabditis elegans	Contains protein domain (PF00153) - Mitochondrial carrier proteins	transport	60433438, 265019, 264784, 264288, 264789, 264689, 265020, 27486382, 263972, 65274791, 264557, 264558
3137	85257947 (6273, 6274)	Novel Protein sim. GBank gll3342730 (AC005331) - R31341_1 [Homo sapiens]		UNCLASSIFIED	22278995, 22278996, 22278997, 22278998, 22278999, 264259, 26331822, 26331825, 29331826, 29331827, 29331828, 264510, 265008, 21906754, 87168474, 265011, 87168555, 265017, 265018, 265019, 18108351, 264682, 264789, 21906785, 21906786, 21906787, 21906789, 55811947, 35695917, 265020, 265021, 52644150, 18108370, 18108374, 22279000, 22279002, 264482, 264485

3144	953536328 (6287, 6288)	Novel Protein sim. GBank gi 4844468 emb CA643322.1 - (AL050225) hypothetical protein [Homo sapiens]			264488, 18108395, 22278986, 35695285, 22278987, 22278989, 2831820, 29331827, 35695652, 2831828, 294106, 2655006, 283007, 283008, 33857402, 8658542, 283011, 18108351, 264446, 264958, 21906765, 21906766, 21906767, 265020, 265021, 52844150, 27466261, 19108370, 18108374, 35696423, 56182323, 83373044, 22278990, 22379002, 264367
3145	86511657 (6289, 6290)	Novel Protein sim. GBank gi 3819709 emb CA603330 - (Z81119) Similarity to Human endosomal protein P162 (TRQ13073); cDNA EST EMBLZ14487 comes from this gene; cDNA EST EMBLZ14550 comes from this gene; cDNA EST EMBL027011 comes from this gene; cDNA EST EMBL027015 comes from this gene	UNCLASSIFIED		22278990, 22379002, 264367, 283006, 58912038, 265010, 21906766, 29148627, 21906769, 29148784, 264682, 33857023, 33857109, 35695763, 263981, 56182323, 87166519
3146	87756314 (6291, 6292)	Novel Protein sim. GBank gi 2135746 pir S09890 - mitogen inducible gene mig-2 - human	Contains protein domain (PF00169) - struct PH domain		264259, 29331826, 29331828, 29331830, 264510, 264511, 265007, 265009, 264600, 265017, 18108351, 264446, 264958, 21906766, 265021, 264682, 33857109, 18108374, 35696423, 35695855, 60432113, 264564
3147	94848512 (6293, 6294)	Novel Protein sim. GBank gi 3874279 emb CA607315.1 - (Z82825) predicted using GeneFinder; cDNA EST YK319612.3 comes from this gene; cDNA EST YK319612.5 comes from this gene [Caenorhabditis elegans]	Contains protein domain (PF00702) - UNCLASSIFIED haloacid dehalogenase-like hydrolase		56181688, 35696286, 60432049, 264259, 56182181, 35331625, 60432289, 35695602, 56182435, 265008, 264910, 60431735, 60433556, 60433438, 265010, 264446, 264288, 265022, 33857023, 33857109, 60431528, 55274781, 294631, 56182323, 264404, 22279002
3148	95362169 (6295, 6296)	Novel Protein sim. GBank gi 525232 gen AD40051.1 AF083310 - (AF083108) sirinun type 3 [Homo sapiens]	UNCLASSIFIED		35696286, 35696052, 264511, 86585642, 97168474, 264764, 35696423, 264555, 264556, 264557, 264558, 63373044, 9522486, 60432113
3149	95308548 (6297, 6298)	Novel Protein sim. GBank gi 420046 (AF102777) - FYVE finger-containing phosphoinositide kinase [Mus musculus]	Contains protein domain (PF01383) - eph FYVE zinc finger		29331822, 35696052, 264108, 29148629, 18108381
3150	87655472 (6299, 6300)	Novel Protein sim. GBank gi 3376454 emb CA676893 (Y117650) ganglioside-induced differentiation associated protein 1 [Mus musculus]	Contains protein domain (PF00043) - transferase Glutathione S-transferases		264259, 29331822, 29331824, 29331825, 29331827, 52846317, 264686, 35695855, 56182323, 264639
3151	87772355 (6301, 6302)	Novel Protein sim. GBank gi 172591 (M63577) - SFP1 [Saccharomyces cerevisiae]	Contains protein domain (PF00096) - oncogene Zinc finger, C2H2 type		29331822, 265008
3152	85699108 (6303, 6304)		UNCLASSIFIED		21906754, 87166555, 264685, 21908768, 52844150, 27468264, 35696423, 22279000

3153	9531298 (6305, 6306)	Novel Protein sim. GBank g1469504 (g1469504:2720.1)(AF14395) corom- 3 [Mus musculus]	Contains protein domain (PF00400) WD domain, G-beta repeat	struct	264488, 5264636, 35696286, 22278996, 22278997, 22278998, 60432049, 264259, 29331826, 60432289, 33656970, 264508, 264808, 33657402, 264595, 60433408, 87168474, 87168559, 264601, 265019, 264448, 264692, 264764, 264285, 264369, 264758, 21908765, 21908766, 21908767, 21908768, 21908769, 20148784, 265021, 265022, 60170815, 52644150, 264890, 264692, 33657023, 65274620, 33657109, 18108370, 35695655, 2646538, 60170384, 87168518, 60432113, 22279000, 22279002, 22278998, 264259, 26331824, 66712502, 265008, 265010, 265017, 18108354, 264691, 33657023, 264509, 264907, 264908, 264510, 29331826, 264509, 264907, 264908, 264510, 264511, 264512, 33657402, 264691, 264693, 33657023, 18108370, 264534, 264639, 18108385, 264553, 264488
3154	87718573 (6307, 6308)	Novel Protein sim. GBank g1469504 (g1469504:2720.1)(AF14395) corom- 3 [Mus musculus]	Contains protein domain (PF00652) Similarity to lectin domain of ricin beta-chain, 3 copies.	transerase	56182575, 22278998, 22278997, 22278998, 22278999, 60432049, 264259, 29331822, 29331824, 66714117, 29331825, 29331826, 29331827, 35696052, 52644045, 265007, 265009, 60170837, 60432229, 60433356, 21908754, 33109954, 87168474, 265010, 265017, 265018, 265019, 18108351, 264448, 264288, 264689, 21908768, 21908769, 21908770, 35695617, 265020, 265022, 264692, 18108370, 35696423, 58182323, 22278998, 18108396, 264259, 29331824, 35696052, 20148498, 87168559, 265017, 264448, 264288, 264691, 18108385, 52645129, 35696423, 52644132
3155	87762394 (6309, 6310)	Novel Protein sim. GBank g1726571 (g1726571:2934)(U7_HUMAN - IIII ALU SUBFAMILY SQ WARNING ENTRY fill)	Contains protein domain (PF00023) Arx repeat	kinase	264488, 263974
3156	87737449 (6311, 6312)	Novel Protein sim. GBank g1563007 (g1563007:1)(AC00601 - (AC00601) N- acetylglucosaminyltransferase, similar to Q10473 (P10G1709599) [Homo sapiens])	Contains protein domain (PF00023) Arx repeat	kinase	264488, 263974
3157	88258577 (6313, 6314)	Novel Protein sim. GBank g1563007 (g1563007:1)(AF15677 - (AF15677) ASB-3 protein [Homo sapiens])	Contains protein domain (PF00023) Arx repeat	kinase	264488, 263974
3158	80034118 (6315, 6316)	Novel Protein sim. GBank g1563007 (g1563007:1)(AF15677 - (AF15677) ASB-3 protein [Homo sapiens])	Contains protein domain (PF00023) Arx repeat	kinase	264488, 263974
3159	94124114 (6317, 6318)	Novel Protein sim. GBank g1563007 (g1563007:1)(AF15677 - (AF15677) ASB-3 protein [Homo sapiens])	Contains protein domain (PF00023) Arx repeat	kinase	264488, 263974
3160	80221088 (6319, 6320)	Novel Protein sim. GBank g1563007 (g1563007:1)(AF15677 - (AF15677) ASB-3 protein [Homo sapiens])	Contains protein domain (PF00023) Arx repeat	kinase	264488, 263974

3161	8607411 (6321, 6322)	264468, 22278905, 22278907, 22278908, 264259, 20331822, 6043298, 26331828, 52644045, 265017, 265018, 264448, 264288, 21906754, 21906767, 265020, 18108374, 264638, 264566		
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Table 2

Tissue ID	Tissue Name	Tissue Information	Disease Association
20281069	192xN	Protein-protein Interactions	Any
20281071	192xN	Protein-protein Interactions	Any
20281149	192xN	Protein-protein Interactions	Any
20281152	192xN	Protein-protein Interactions	Any
264111	276xN	Protein-protein Interactions	Any
264112	276xN	Protein-protein Interactions	Any
263966	384xN	Protein-protein Interactions	Any
263967	384xN	Protein-protein Interactions	Any
264110	552xN	Protein-protein Interactions	Any
18108379	SPH 52.1 (Adrenal Gland)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy , Congenital Adrenal Hyperplasia.
18108381	SPH 52.2 (Fetal Lung)	Fetal Lung	Cystic Fibrosis, infection, lung cancer
18108383	SPH 52.3 (B's Lymphoma- Raji)	Lymphoma derived from B cells	Blood cancers, hematopoiesis, leukemia
18108368	SPH 52.5 (Salivary Gland)	Salivary Gland	Dry mouth, infection
18108384	SPH 52.6 (Brain- Thalamus)	Thalamus	Brain cancer, head injury, obesity, neurological disorders, neuropsychiatric disorders
18108394	SPH 53.1 (Adrenal Gland)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy , Congenital Adrenal Hyperplasia.
18108355	SPH 53.2 (Fetal Lung)	Fetal Lung	Cystic Fibrosis, infection, lung cancer
18108359	SPH 53.3 (B's Lymphoma- Raji)	Lymphoma derived from B cells	Blood cancers, hematopoiesis, leukemia
18108361	SPH 53.4 (Mammary Gland)	Mammary Gland	Lactation disorders, breast cancer
18108362	SPH 53.5 (Salivary Gland)	Salivary Gland	Dry mouth, infection
18108366	SPH 53.6 (Brain- Thalamus)	Thalamus	Brain cancer, head injury, obesity, neurological disorders, neuropsychiatric disorders
18108354	SPH 54.1 (Adrenal Gland)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy , Congenital Adrenal Hyperplasia.
18108392	SPH 54.2 (Fetal Lung)	Fetal Lung	Cystic Fibrosis, infection, lung cancer
18108348	SPH 54.3 (B's Lymphoma- Raji)	Lymphoma derived from B cells	Blood cancers, hematopoiesis, leukemia
18108382	SPH 54.4 (Mammary Gland)	Mammary Gland	Lactation disorders, breast cancer
18108395	SPH 54.5 (Salivary Gland)	Salivary Gland	Dry mouth, infection
18108365	SPH 54.6 (Brain- Thalamus)	Thalamus	Brain cancer, head injury, obesity, neurological disorders, neuropsychiatric disorders
18108397	SPH 55.1 (Adrenal Gland)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy , Congenital Adrenal Hyperplasia.
18108398	SPH 55.2 (Fetal Lung)	Fetal Lung	Cystic Fibrosis, infection, lung cancer
18108364	SPH 55.3 (B's Lymphoma- Raji)	Lymphoma derived from B cells	
18108388	SPH 55.4 (Mammary Gland)	Mammary Gland	Lactation disorders, breast cancer
18108358	SPH 55.5 (Salivary Gland)	Salivary Gland	Dry mouth, infection
20281099	SPH 56.2 (MG63)		
20281100	SPH 56.3 (U2SMC)		
264404	SPH.1 (Brain)	Whole Brain	Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection

264510	SPH.10 (Pancreas)	Pancreas	Pancreatitis, diabetes, pancreatic cancer
264511	SPH.11 (Placenta)	Placenta	Infertility, birth defects
264512	SPH.12 (Thyroid)	Thyroid	Hyperparathyroidism, Hypoparathyroidism
264555	SPH.13 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264556	SPH.14 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264557	SPH.15 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264558	SPH.16 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264559	SPH.17 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264569	SPH.19 (One Fetal tissue and two cell lines)	Mixed	
264687	SPH.19.1 (fetal thymus - CRL7046)	Fetal Thymus	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, immunodeficiencies
264688	SPH.19.2 (hematopoietic stem cells - CRL2043)	Hematopoietic stem cells	Leukemia, osteoporosis, post-chemotherapeutic stem cell repopulation
264689	SPH.19.3 (osteogenic sarcoma cell lines - HTB96)	Osteogenic Sarcoma	Sarcomas, osteoporosis, osteopetrosis
264690	SPH.19.4 (Fetal Liver)	Fetal liver	Von Hippel-Lindau (VHL) syndrome, Cirrhosis, Transplantation
264691	SPH.19.5 (Heart)	Heart	Cardiomyopathy, Atherosclerosis, Hypertension, Congenital heart defects, Aortic stenosis, Atrial septal defect (ASD), Atrioventricular (A-V) canal defect, Ductus arteriosus, Pulmonary stenosis, Subaortic stenosis, Ventricular septal defect (VSD), valve diseases, Tuberosus sclerosis, Scleroderma, Obesity, Transplantation
264692	SPH.19.6 (Spleen)	Spleen	Hemophilia, Hypercoagulation, Idiopathic thrombocytopenic purpura, Immunodeficiencies, Graft versus host
264693	SPH.19.7 (Pituitary)	Pituitary	Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberosus sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264482	SPH.2 (Brain)	Brain	Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberosus sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection

264600	SPH.21 (Fetal Brain)	Fetal brain	Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264601	SPH.22 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264602	SPH.23 (Thyroid)	Thyroid	Hyperthyroidism and Hypothyroidism
264603	SPH.24 (Pancreas)	Pancreas	Pancreatitis, diabetes, pancreatic cancer
264604	SPH.25 (Lymph Node)	Lymph Node	Lymphedema, Allergies
264605	SPH.26 (Placenta)	Placenta	Infertility, birth defects
264634	SPH.28 (Heart)	Heart	Cardiomyopathy, Atherosclerosis, Hypertension, Congenital heart defects, Aortic stenosis, Atrial septal defect (ASD), Atrioventricular (A-V) canal defect, Ductus arteriosus, Pulmonary stenosis, Subaortic stenosis, Ventricular septal defect (VSD), valve diseases, Tuberous sclerosis, Scleroderma, Obesity, Transplantation
264635	SPH.29 (Fetal Kidney)	Fetal Kidney	Diabetes, Autoimmune disease, Renal artery stenosis, Interstitial nephritis, Glomerulonephritis, Polycystic kidney disease, Systemic lupus erythematosus, Renal tubular acidosis, IgA nephropathy, Hypercalcaemia, Lesch-Nyhan syndrome
264483	SPH.3 (Bone Marrow)	Bone marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264636	SPH.30 (Lymph Node)	Lymph Node	Lymphedema, Allergies
264637	SPH.31 (Pancreas)	Pancreas	Pancreatitis, diabetes, pancreatic cancer
264638	SPH.32 (Thyroid)	Thyroid	Hyperthyroidism and Hypothyroidism
264639	SPH.33 (Fetal Brain)	Fetal brain	Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264484	SPH.4 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264758	SPH.44.1 (Kidney)	Kidney	Diabetes, Autoimmune disease, Renal artery stenosis, Interstitial nephritis, Glomerulonephritis, Polycystic kidney disease, Systemic lupus erythematosus, Renal tubular acidosis, IgA nephropathy, Hypercalcaemia, Lesch-Nyhan syndrome
264760	SPH.44.2 (Fetal Liver)	Fetal Liver	Von Hippel-Lindau (VHL) syndrome, Cirrhosis, Transplantation

264762	SPH.44.3 (Heart)	Heart	Cardiomyopathy, Atherosclerosis, Hypertension, Congenital heart defects, Aortic stenosis, Atrial septal defect (ASD), Atrioventricular (A-V) canal defect, Ductus arteriosus, Pulmonary stenosis, Subaortic stenosis, Ventricular septal defect (VSD), valve diseases, Tuberosus sclerosis, Scleroderma, Obesity, Transplantation
264764	SPH.44.4 (Prostate)	Prostate	Prostate Cancer
264766	SPH.44.5 (Spleen)	Spleen	Hemophilia, Hypercoagulation, Idiopathic thrombocytopenic purpura, Immunodeficiencies, Graft versus host
264768	SPH.44.6 (pituitary)	Pituitary	Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberosus sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264769	SPH.44.7 (Uterus)	Uterus	Infertility, birth defects
264905	SPH.48.1 (Burkitt's Lymphoma- Raji)	Burkitt's Lymphoma	Lymphoma, blood cancers
264906	SPH.48.2 (Thalamus- Brain)	Thalamus	Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberosus sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264907	SPH.48.3 (Adrenal Gland)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy, Congenital Adrenal Hyperplasia,
264908	SPH.48.4 (Fetal Lung)	Fetal Lung	Cystic Fibrosis, infection, lung cancer
264909	SPH.48.5 (Salivary Gland)	Salivary Gland	Dry mouth, infection
264910	SPH.48.6 (Mammary Gland)	Mammary Gland	Lactation disorders, breast cancer
265006	SPH.50.1 (B's lymphoma)	Burkitt's Lymphoma	Lymphoma, blood cancers
265007	SPH.50.2 (thalamus)	Thalamus	Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberosus sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
265008	SPH.50.3 (adrenal gland)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy, Congenital Adrenal Hyperplasia,
265009	SPH.50.4 (fetal lung)	Fetal Lung	Cystic Fibrosis, infection, lung cancer
265010	SPH.50.5 (salivary gland)	Salivary Gland	Dry mouth, infection
265011	SPH.50.6 (mammary gland)	Mammary Gland	Lactation disorders, breast cancer
18108385	SPH.51.1 (MCF-7)	Breast Cancer	Breast Cancer
18108370	SPH.51.2 (CCRF-CEM)	Cancer Cell line	Cancer
18108374	SPH.51.3 (K-562)	Cancer Cell line	Cancer
18108351	SPH.51.4 (OVCAR-3)	Ovarian cancer	Ovarian cancer
18108372	SPH.51.5 (HL-60)	Cancer Cell line	Cancer
264486	SPH.6 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,

264508	SPH.8 (Fetal Brain)		Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264509	SPH.9 (Lymph Node)	Lymph Node	Lymphedema , Allergies
20798451	SRH.56.3 (UisMC)		
264487	SRH.1 (Brain)	Brain	Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264534	SRH.11 (Bone marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264535	SRH.12 (Bone marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264563	SRH.19 (Fetal Brain)	Fetal brain	Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264488	SRH.2 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264564	SRH.20 (Lymph Node)	Lymph Node	Lymphedema , Allergies
264565	SRH.21 (Pancreas)	Pancreas	Pancreatitis, diabetes, pancreatic cancer
264566	SRH.22 (Placenta)	Placenta	Infertility, birth defects
264567	SRH.23 (Thyroid)	Thyroid	Hyperthyroidism and Hypothyroidism
264591	SRH.25 (Fetal Brain)	Fetal brain	Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264592	SRH.26 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
264593	SRH.27 (thyroid)	Thyroid	Hyperthyroidism and Hypothyroidism
264594	SRH.28 (Pancreas)	Pancreas	Pancreatitis, diabetes, pancreatic cancer
264595	SRH.29 (Lymph Node)	Lymph Node	Lymphedema , Allergies
264489	SRH.3 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,

264596	SRH.30 (Placenta)	Placenta	Infertility, birth defects
264628	SRH.33 (fetal Kidney)	Fetal kidney	Diabetes, Autoimmune disease, Renal artery stenosis, Interstitial nephritis, Glomerulonephritis, Polycystic kidney disease, Systemic lupus erythematosus, Renal tubular acidosis, IgA nephropathy, Hypercalcaemia, Lesch-Nyhan syndrome
264629	SRH.34 (lymph Node)	Lymph Node	Lymphedema, Allergies
264630	SRH.35 (Pancreas)	Pancreas	Pancreatitis, diabetes, pancreatic cancer
264631	SRH.36 (thyroid)	Thyroid	Hyperthyroidism and Hypothyroidism
264632	SRH.37 (Fetal Brain)	Fetal Brain	Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264490	SRH.4 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft vesus host,
264681	SRH.43.1 (fetal thymus - CRL7046)	Fetal Thymus	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, immunodeficiencies
264682	SRH.43.2 (hematopoietic stem cells - CRL2043)	Hematopoietic stem cells	Leukemia, osteoporosis, post-chemotherapeutic stem cell repopulation
264683	SRH.43.3 (osteogenic sarcoma cell lines - HTB96)	Osteogenic Sarcoma	Sarcomas, osteoporosis, osteopetrosis
264684	SRH.43.4 (Fetal Liver)	Fetal Liver	Von Hippel-Lindau (VHL) syndrome, Cirrhosis, Transplantation
264685	SRH.43.6 (Spleen)	Spleen	Hemophilia, Hypercoagulation, Idiopathic thrombocytopenic purpura, Immunodeficiencies, Graft vesus host
264686	SRH.43.7 (pituitary)	Pituitary	Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264757	SRH.44.1 (Kidney)	Kidney	Diabetes, Autoimmune disease, Renal artery stenosis, Interstitial nephritis, Glomerulonephritis, Polycystic kidney disease, Systemic lupus erythematosus, Renal tubular acidosis, IgA nephropathy, Hypercalcaemia, Lesch-Nyhan syndrome
264759	SRH.44.2 (Fetal Liver)	Fetal Liver	Von Hippel-Lindau (VHL) syndrome, Cirrhosis, Transplantation
264761	SRH.44.3 (Heart)	Heart	Cardiomyopathy, Atherosclerosis, Hypertension, Congenital heart defects, Aortic stenosis, Atrial septal defect (ASD), Atrioventricular (A-V) canal defect, Ductus arteriosus, Pulmonary stenosis, Subaortic stenosis, Ventricular septal defect (VSD), valve diseases, Tuberous sclerosis, Scleroderma, Obesity, Transplantation
264763	SRH.44.4 (Prostate)	Prostate	Prostate Cancer
264765	SRH.44.5 (Spleen)	Spleen	Hemophilia, Hypercoagulation, Idiopathic thrombocytopenic purpura, immunodeficiencies, Graft vesus host

264767	5RH.44.6 (Pituitary)	Pituitary	Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
264828	5RH.46.1 (Lymph Node)	Lymph Node	Lymphedema , Allergies
264887	5RH.47.5 (Fetal Liver)	Fetal Liver	Von Hippel-Lindau (VHL) syndrome, Cirrhosis, Transplantation
18108377	5RH.50.1 (B's lymphoma)	Burkitt's Lymphoma	Lymphoma, blood cancers
18108380	5RH.50.2 (thalamus)	Thalamus	Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
18108396	5RH.50.3 (adrenal gland)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy , Congenital Adrenal Hyperplasia,
18108391	5RH.50.4 (fetal lung)	Fetal Lung	Airway diseases, infection
18108357	5RH.50.5 (salivary gland)	Salivary Gland	Dry mouth, infection
18108390	5RH.50.6 (mammary gland)	Mammary Gland	Lactation disorders, breast cancer
264532	5RH.9 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
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263976	736xN		
263981	736xN		
20281166	96xN		
20281169	96xN		
20281171	96xN		
263994	cDNA-ORF Selection		
264080	Mx96		
21906754	NQH 6.1 (HH729)		
22278996	NQH 6.10 (PrEC)	Endothelial cells	heart disease, cancer
22278997	NQH 6.11 (CAEC)	Endothelial cells	heart disease, cancer
22278998	NQH 6.12 (CSC)	Cancer Cell line	Cancer
22278999	NQH 6.13 (NHNPC)	Cancer Cell line	Cancer
22279000	NQH 6.14 (NHMC-RM)	Cancer Cell line	Cancer
22279002	NQH 6.15 (Hypothalamus)	Hypothalamus	Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection, Obesity
21906764	NQH 6.2 (In Dated Platelets)	Platelets	Clotting diseases, stroke
21906765	NQH 6.3 (HuVec)	Endothelial cells	heart disease, cancer
87168474	NQH 6.3 (Sized-HUVEC)	Endothelial cells	heart disease, cancer
21906766	NQH 6.4 (UtMVEC- myo)	Cancer Cell line	Cancer
21906767	NQH 6.5 (NHEM-neo)	Cancer Cell line	Cancer
21906768	NQH 6.6 (NHEK)	Cancer Cell line	Cancer
21906769	NQH 6.7 (ByCAEC)	Endothelial cells	heart disease, cancer
22278994	NQH 6.8 (NHA)	Cancer Cell line	Cancer

22278995	NQH 6.9 (PrSC)	Cancer Cell line	Cancer
27486261	NQH 7.1 (Jurkat E6-untreated)	Cancer Cell line	Cancer
27486262	NQH 7.2 (TF1-untreated)	Cancer Cell line	Cancer
27486264	NQH 7.3 (U87-untreated)	Cancer Cell line	Cancer
27486265	NQH 7.4 (THP1-untreated)	Cancer Cell line	Cancer
29331822	NQH 8.1 (Brain- amygdala)		Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
29331824	NQH 8.2 (Brain-hippocampus)		Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
29331825	NQH 8.3 (Brain- substantia nigra)		Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection
29331826	NQH 8.4 (small intestine)	Small intestine	digestive diseases, obesity, diabetes
29331827	NQH 8.5 (Spinal cord)	Spinal chord	paralysis, neurodegenerative disorders
29331828	NQH 8.6 (stomach)	Stomach	Stomach cancer
29331830	NQH 8.7 (Trachea)	Trachea	Airway diseases, infection
87168518	NQH 9.1 (Sized-MG-63_treatment pool)		
87168559	NQH 9.2 (Sized-HEPG2 untreated)		
35695763	NQH.10.1 (MCF-7untreated)	Cancer Cell line	Cancer
35695855	NQH.10.2 (U-937_treatment pool)	Cancer Cell line	Cancer
35695917	NQH.10.3 (JAR)	Cancer Cell line	Cancer
35696052	NQH.10.4 (PA-1)	Cancer Cell line	Cancer
35696286	NQH.10.5 (CADMEC)	Endothelial cells	heart disease, cancer
35696423	NQH.10.6 (CADMEC_LA)	Endothelial cells	heart disease, cancer
52644045	NQH.11.1 (SK-PN-DW)	Cancer Cell line	Cancer
52644150	NQH.11.2 (Chorionic Villus Cells)	Chorionic villus	fertility, birth defects
52644229	NQH.11.3 (A549)	Cancer Cell line	Cancer
52644296	NQH.11.4 (U266B1)	Cancer Cell line	Cancer
52644332	NQH.11.5 (Daoy)	Cancer Cell line	Cancer
52644507	NQH.11.6 (SW1783)	Cancer Cell line	Cancer
52645080	NQH.12.1 (U-118MG)	Cancer Cell line	Cancer
52645129	NQH.12.2 (A204)	Cancer Cell line	Cancer
52645156	NQH.12.3 (T24)	Cancer Cell line	Cancer
52646317	NQH.12.4 (G-401)	Cancer Cell line	Cancer
52646365	NQH.12.5 (CaSk)	Cancer Cell line	Cancer
52646842	NQH.12.6 (SHP-77)	Cancer Cell line	Cancer

60424179	NQH.14.1 (Yale75_breast carcinoma)	Breast carcinoma	Breast Cancer
60424269	NQH.14.2 (Yale78B_ovarytumor)	Ovary tumor	Ovarian cancer
60431528	NQH.14.3 (Yale79_prostateBPH)	Prostate	Prostate Cancer
60431602	NQH.14.4 (Yale80_ProstateAdenocarcinoma)	Prostate	Prostate Cancer
60431735	NQH.14.5 (Yale86_UterineMyoma)	Uterine Myoma	Uterine Cancer
60431850	NQH.14.6 (Yale207_Myometrium)	Myometrium	Fertility
60432049	NQH.15.1 (Yale99_cervix)	Cervix	Osteoporosis, cervical cancer
60432113	NQH.15.2 (Yale45_spleenITP)		Hemophilia, Hypercoagulation, Idiopathic thrombocytopenic purpura, Immunodeficiencies, Graft versus host
60432229	NQH.15.3 (Yale16_Skin)	Skin	wound healing, melanoma
60432289	NQH.15.4 (Yale137_Parotid)		
60433356	NQH.15.5 (Yale38_SmallIntestine)	Small intestine	digestive diseases, obesity, diabetes
60433438	NQH.15.6 (Yale28_ColonAscending)	Colon	Colon cancer
65274444	NQH.17.1 (Larynx)	Larynx	Cancer
65274572	NQH.17.2 (Duodenum)	Duodenum	
65274620	NQH.17.3 (Kidney, Primary tumors)		Diabetes, Autoimmune disease, Renal artery stenosis, Interstitial nephritis, Glomerulonephritis, Polycystic kidney disease, Systemic lupus erythematosus, Renal tubular acidosis, IgA nephropathy, Hypercalcemia, Lesch-Nyhan syndrome
65274727	NQH.17.4 (Lung Pleura, normal)	Lung	Airway diseases, infection
65274791	NQH.17.5 (Lung, Normal Adult)	Lung	Airway diseases, infection
83373044	NQH.18.230 (Pooled adrenal gland, placenta)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy, Congenital Adrenal Hyperplasia,
85658542	NQH.18.560 (Pooled uterus, BeWo pool)	Uterus	Infertility, birth defects
33656970	NQH.9.1 (MG-63_treatment pool)	Cancer Cell line	Cancer
33657023	NQH.9.2 (HEPG2 untreated)		Von Hippel-Lindau (VHL) syndrome, Cirrhosis, Transplantation
33657084	NQH.9.3 (PC3_untreated)	Cancer Cell line	Cancer
33657109	NQH.9.4 (TF-1_TPA)	Cancer Cell line	Cancer
33657182	NQH.9.5 (TF-1_TPO)	Cancer Cell line	Cancer
33657349	NQH.9.6 (TF-1_Hemin)	Cancer Cell line	Cancer
33657402	NQH.9.7 (HFDPC)	Cancer Cell line	Cancer
264259	NQH1 (Mixture of eight adult & two fetal tissues)		
264288	NQH2 (Ten tissues plus lymphocyte control)		
264448	NQH3 (Bone Marrow)	Bone Marrow	Hemophilia, hypercoagulation, Idiopathic thrombocytopenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Graft versus host,
265017	NQH4.1 (lymph node)	Lymph Node	Lymphedema, Allergies

265018	NQH4.2 (fetal kidney)	Fetal Kidney	Diabetes, Autoimmune disease, Renal artery stenosis, Interstitial nephritis, Glomerulonephritis, Polycystic kidney disease, Systemic lupus erythematosus, Renal tubular acidosis, IgA nephropathy, Hypercalcaemia, Lesch-Nyhan syndrome
66712502	NQH4.2 (Sized)		
265019	NQH4.3 (pituitary gland)		Von Hippel-Lindau (VHL) syndrome, Alzheimer's disease, Stroke, Tuberosus sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection, Obesity
66714117	NQH4.3 (Sized)		
265020	NQH4.4 (testis)	testis	Infertility, birth defects
265021	NQH4.5 (fetal liver)	Fetal Liver	Von Hippel-Lindau (VHL) syndrome, Cirrhosis, Transplantation
265022	NQH4.6 (thyroid)	Thyroid	Hyperthyroidism and Hypothyroidism
18108376	NQH5.1 (MCF-7)	Breast cancer	Breast Cancer
18108387	NQH5.2 (CCRF-CEM)	Cancer Cell line	Cancer
264952	NRL1: HPLC FRACTIONATION OF RELIG		
263971	Old BB3 Baits		
263969	Old BB5 Baits		
263975	ORFSEL		
263972	OTHER Baits		
263978	pGALORF		
264106	PPBAITS		
264088	QC-YA7		
264089	QC-YA8		
264102	Resequenced Interactors		
264369	RRH.1		
60170394	RRH.10.1 (MCF-7untreated)	Breast cancer	Breast Cancer
60170615	RRH.10.2 (U-937_treatment pool)	Cancer Cell line	Cancer
60170831	RRH.10.3 (JAR)	Cancer Cell line	Cancer
60174639	RRH.11.8 (HeLa)	Cancer Cell line	Cancer
264113	mQEA Baits		
263973	RRQEA B5 baits		
29146498	SRD 3.1 (SKMC)	Cancer Cell line	Cancer
29146499	SRD 3.2 (SKMC)	Cancer Cell line	Cancer
29147620	SRD 3.3 (RPTEC)	Cancer Cell line	Cancer
29148627	SRD 3.4 (HRCE)	Cancer Cell line	Cancer
29148629	SRD 3.6 (HRE)	Cancer Cell line	Cancer
29148784	SRD 3.7 (HRE)	Cancer Cell line	Cancer
55810764	SRD 7.1 (Lymph Node)	Lymph Node	Lymphedema, Allergies
55811150	SRD 7.2 (pancreas)	Pancreas	Pancreatitis, diabetes, pancreatic cancer
55811386	SRD 7.3 (Adrenal Gland)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy, Congenital Adrenal Hyperplasia,

55811576	SRD.7.4 (Pituitary Gland)	Pituitary	Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection, Obesity
55811957	SRD.7.5 (Fetal Liver)	Fetal Liver	Von Hippel-Lindau (VHL) syndrome, Cirrhosis, Transplantation
55812038	SRD.7.6 (Fetal Kidney)	Fetal kidney	Diabetes, Autoimmune disease, Renal artery stenosis, Interstitial nephritis, Glomerulonephritis, Polycystic kidney disease, Systemic lupus erythematosus, Renal tubular acidosis, IgA nephropathy, Hypercalcaemia, Lesch-Nyhan syndrome
56181562	SRD.8.1 (Lymph Node)	Lymph Node	Lymphedema , Allergies
56181686	SRD.8.2 (Pancreas)	Pancreas	Pancreatitis, diabetes, pancreatic cancer
56182181	SRD.8.3 (Adrenal Gland)	Adrenal Gland/Suprarenal gland	Adrenoleukodystrophy , Congenital Adrenal Hyperplasia,
56182323	SRD.8.4 (Pituitary Gland)	Pituitary	Von Hippel-Lindau (VHL) syndrome , Alzheimer's disease, Stroke, Tuberous sclerosis, hypercalcaemia, Parkinson's disease, Huntington's disease, Cerebral palsy, Epilepsy, Lesch-Nyhan syndrome, Multiple sclerosis, Ataxia-telangiectasia, Leukodystrophies, Behavioral disorders, Addiction, Anxiety, Pain, Neuroprotection, Obesity
56182435	SRD.8.5 (Fetal Liver)	Fetal Liver	Von Hippel-Lindau (VHL) syndrome, Cirrhosis, Transplantation
56182575	SRD.8.6 (Fetal Kidney)		Diabetes, Autoimmune disease, Renal artery stenosis, Interstitial nephritis, Glomerulonephritis, Polycystic kidney disease, Systemic lupus erythematosus, Renal tubular acidosis, IgA nephropathy, Hypercalcaemia, Lesch-Nyhan syndrome
32833986	SRD4: HL adapter		
56526486	SRD5: 1:rr fragments		
33109954	SRD5: long-RXRJ		
56994075	SRD9.1 (CS/SC)	Cancer Cell line	Cancer
263977	TSC Screen 1		

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Ser Glu Gln Asp Ala Ile Val Pro Ala Val Leu Lys Leu Trp Glu Thr
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Tyr Arg Asp Glu Asp Ala Thr Leu Val Glu Val Asn Pro Met Ile Lys
          145          150          155          160
Thr Gly Asp Gly Arg Ile Leu Ala Ile Asp Gly Lys Met Thr Val Asp
          165          170          175
Asn Asn Ala Ser Phe Arg Gln Pro Asp Arg Ala Gly Leu Val Asp Arg
          180          185          190
Ala Thr Thr Asp Pro Leu Glu Leu Arg Ala Gly Glu Leu Gly Leu Asn
          195          200          205
Tyr Val Lys Leu Asp Gly Asn Val Gly Val Ile Gly Asn Gly Ala Gly
          210          215          220
Leu Val Met Ser Thr Leu Asp Cys Val Ala Tyr Ala Gly Glu Asn Phe
          225          230          235          240
Pro Gly Ser Pro Ala Pro Ala Asn Phe Leu Asp Ile Gly Gly Ala
          245          250          255
Ser Ala Glu Ile Met Ala Asn Gly Leu Asp Leu Ile Met Ser Asp Glu
          260          265          270
Gln Val Arg Ser Val Phe Val Asn Val Phe Gly Gly Ile Thr Ala Cys
          275          280          285
Asp Gln Val Ala Leu Gly Ile Lys Gly Ala Leu Glu Lys Leu Gly Asp
          290          295          300
Lys Ala Val Lys Pro Leu Val Val Arg Leu Asp Gly Asn Ala Val Ala
          305          310          315          320
Glu Gly Arg Lys Ile Leu Glu Glu Phe
          325

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<210> 5

<211> 622

<212> DNA

<213> Homo sapiens

<400> 5

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acgcgtggcc tagacctgaa tccattcctc acaaaacagt ctccctccct gccatgggat
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tccctgggggt ttccacaggc cacagctcta atgggtctgca gcaggttacc ttgttcccca
  120
gaacatagct tgtcataaca tctctgcagg gttctcccaa acccctttct gcttggcaac
  180
agctgacatc acacctagct gtaagtccct gtatgacgca aattactttt tggagactgg
  240
gggtagcagg ggcattgggg taatagccct ctagcccttt ttgagggaac cacatgggtg
  300

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aggctatttt ggggctggga agtggggggc tgggtgtccc tggatggctg tgctggcctc
 360
 tggctgcaag ggagaggggc acaggcaagg acatgacccc cgtaaccctc gagccccctc
 420
 cagaaattta accagagcct gtcctcctt tcttgctgc ccccaacatc tcacaatccc
 480
 tccctgtgatg gcagatgtct ccatctactc tacagacacc tgcaactatc attcccttga
 540
 tccgtggtaa ttaggagggg actcctctgt gaagaaccgc ttctaccatc ctctttttaga
 600
 aactctttct ccaactgggat cc
 622

<210> 6
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 6
 Met Ser Leu Pro Val Pro Leu Ser Leu Ala Ala Arg Gly Gln His Ser
 1 5 10 15
 His Pro Gly Asp Thr Arg Pro Pro Leu Pro Ser Pro Lys Ile Ala Ser
 20 25 30
 Pro Met Cys Phe Pro Gln Lys Gly Leu Glu Gly Tyr Tyr Pro Asn Ala
 35 40 45
 Pro Ala Thr Pro Ser Leu Gln Lys Val Ile Cys Asp Leu Gln Gly Leu
 50 55 60
 Thr Ala Arg Cys Asp Val Ser Cys Cys Gln Ala Glu Arg Gly Leu Gly
 65 70 75 80
 Glu Pro Cys Arg Asp Val Met Thr Ser Tyr Val Leu Gly Asn Lys Val
 85 90 95
 Thr Cys Cys Arg Pro Leu Glu Leu Trp Pro Val Lys Thr Pro Gly Asn
 100 105 110
 Pro Met Ala Arg Arg Glu Thr Val Leu
 115 120

<210> 7
 <211> 480
 <212> DNA
 <213> Homo sapiens

<400> 7
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 120
 tgaatgggct ttcagtgtgg ggacagcaaa acatgcacta gggcccagag tggcagttct
 180
 ctgggtgtgg agagtgcctg ccacaggcct tggccagagc cgtgagggga gtgggtgtgtg
 240
 aaaggccacc tccacgtggg taagcgtgag gacttggact tctctggcac tgagatggga
 300
 cctcctgcct gtggggagtca tctggccacc accctggggc cagtaaagggt tggagctaga
 360

agggtcgtcc tccctgactt gagctctgag ggctttgcct gccagccag agcggcaagg
 420
 cacaggggac cctcggggac gcccatggcc accctgggga agacagggct cctcacgcgt
 480

<210> 8
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 8
 Met Gly Phe Gln Cys Gly Asp Ser Lys Thr Cys Thr Arg Ala Gln Ser
 1 5 10 15
 Gly Ser Ser Leu Gly Val Glu Ser Ala Cys His Arg Pro Trp Pro Glu
 20 25 30
 Pro Val Arg Glu Trp Cys Val Lys Gly His Leu His Val Gly Lys Arg
 35 40 45
 Glu Asp Leu Asp Phe Ser Gly Thr Glu Met Gly Pro Pro Ala Cys Gly
 50 55 60
 Ser His Leu Ala Thr Thr Leu Gly Pro Val Lys Val Gly Ala Arg Arg
 65 70 75 80
 Val Val Leu Pro Asp Leu Ser Ser Glu Gly Phe Ala Cys Pro Ala Arg
 85 90 95
 Ala Ala Arg His Arg Gly Pro Ser Gly Thr Pro Met Ala Thr Leu Gly
 100 105 110
 Lys Thr Gly Leu Leu Thr Arg
 115

<210> 9
 <211> 428
 <212> DNA
 <213> Homo sapiens

<400> 9
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 ctctgctgct actttacaat gatccgttct tccccctctc ctctcctggtc aacagctggc
 120
 tcccagggat gctggatgac ctctttcagt ccatgttctc gtgcgacctg ctgctcttct
 180
 ggctgtgcgt gtaccacggg attcgtgtcc agggagaaag aaagtgttta actttctatt
 240
 tgcctaaatt ctctattgtt ggactattgt ggttggttc tggtacgcta ggaatatggc
 300
 aaacagttaa cgaattacat gatccaatgt accagtatcg agttgatacc ggaatttttc
 360
 agggaatgaa ggtcttcttc atggtggtgg cagcgtgtga cattctgtac ctcttcttct
 420
 tgatagtg
 428

<210> 10
 <211> 138
 <212> PRT

<213> Homo sapiens

<400> 10

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Met Arg Asp Trp Gly Ile Glu Gln Lys Trp Met Ser Val Leu Leu Pro
 1           5           10           15
Leu Leu Leu Leu Tyr Asn Asp Pro Phe Phe Pro Leu Ser Phe Leu Val
 20           25           30
Asn Ser Trp Trp Leu Pro Gly Met Leu Asp Asp Leu Phe Gln Ser Met Phe
 35           40           45
Leu Cys Ala Leu Leu Leu Phe Trp Leu Cys Val Tyr His Gly Ile Arg
 50           55           60
Val Gln Gly Glu Arg Lys Cys Leu Thr Phe Tyr Leu Pro Lys Phe Phe
 65           70           75           80
Ile Val Gly Leu Leu Trp Leu Ala Ser Val Thr Leu Gly Ile Trp Gln
 85           90           95
Thr Val Asn Glu Leu His Asp Pro Met Tyr Gln Tyr Arg Val Asp Thr
100           105           110
Gly Asn Phe Gln Gly Met Lys Val Phe Phe Met Val Val Ala Ala Val
115           120           125
Tyr Ile Leu Tyr Leu Leu Phe Leu Ile Val
130           135

```

<210> 11

<211> 453

<212> DNA

<213> Homo sapiens

<400> 11

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cttaagaatc gcctcaactca acggtcagct tgccgaccat gcccgccctga taatgccccg
60
gaatgttgca ggcaaaactca agaccgggtgg ccttggtgaa ggtccaggtc agctcgccgg
120
acttgccccg ctcgaccagc acgctgttgg ggctcgatcg cttcatgcgc cccatategc
180
catgccccat ggccggcgtgg tccatcttgc ccatgcccgt ggccgctgagc atgccgctgg
240
cttgcatctt gagcatttct ttctggtgtt cggcgtgcat cgccgcgatca cccagattga
300
attcgtgcag taactggcct ttgttgacca gcacaaagcg cagcgtctca ccggctttta
360
catccagagc cttggggcgaa aaggaaatgt cctgcagggt gacttccacg gtgcgcgtgg
420
ctttatcggc cggtgcccggg tggccaaaacg cgt
453

```

<210> 12

<211> 130

<212> PRT

<213> Homo sapiens

<400> 12

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Met Leu Gln Ala Asn Ser Arg Pro Val Ala Leu Val Lys Val Gln Val
 1           5           10           15
Ser Ser Ala Asp Leu Pro Gly Ser Thr Ser Thr Leu Leu Gly Ser Ser

```

	20		25		30
Cys	Phe Met	Pro Pro Ile Ser	Pro Cys	Pro Met	Ala Ala Trp Ser Ile
	35		40		45
Leu	Pro Met	Pro Val Ala Val Ser	Met Pro	Leu Ala Cys	Ile Leu Ser
	50		55		60
Ile	Ser Phe	Trp Cys Ser	Ala Cys	Ile Ala	Ala Ser Pro Arg Leu Asn
	65		70		75
Ser	Cys Ser	Asn Trp	Pro Leu	Leu Thr	Ser Thr Lys Arg Thr Val Ser
		85		90	95
Pro	Ala Phe	Thr Ser Arg	Ala Leu	Gly Glu	Lys Glu Met Ser Cys Arg
		100		105	110
Val	Thr Ser	Thr Val Arg	Val Ala	Leu Ser	Ala Gly Ala Gly Trp Pro
	115		120		125
Asn	Ala				
	130				

<210> 13

<211> 2034

<212> DNA

<213> Homo sapiens

<400> 13

nacgcgttcg cgcgtagctccc cttcctcgcca tccgtcctga gctcctctgct gcccggtgctg
 60
 ggccgtggcca agcaggacac ggtgcgcgtg gccttctgct ccggggagcct gcggctcctc
 120
 tgggcccctac catgctggca ttttctctcca tgtgtcaaac acatgggttc agccagcgaa
 180
 gattccatgg gacctcctcg tgtgggacgt gtgtcccca ccacaaatgg aacgttccct
 240
 gtttgcattc ggagggttg gtggtcctcg tggctggagc agcctggggc cagaggaagc
 300
 cgtatcaacc ggctctgcag cgcttcagcg aggggtgcct ggagtaccta gccaacctgg
 360
 accgagcccc agaccccaag gtcaggaaag acgcctttgc caccgacatc ttcagcgcct
 420
 acgatgttct cttccatcag tggctgcaga gtcgagaagc caagctccgt cttgccgtgg
 480
 tggaggctct ggggacctatg agccatctgc tgcccagtga gaggctggaa gaggcagctgc
 540
 ccaagctcct cctctgggatt ctgcctctc acaagaagca cgcagagacc ttctacttgt
 600
 ccaagagcct gggccagatc ctcgaggcag ctgtgagtgt gggcagccgc aactgggaga
 660
 cccagctgga tgccctcttg gctgcactgc actccagat ctgtgtgctc gtggagtcc
 720
 caagcccctt ggtgatgagt aaccagaagg aggtgctgcg ctgcttcaact gtgctggcct
 780
 gcagctcgcc tgaccgcta ctggccttcc tgetgcccag gctggacacc accaatgaga
 840
 ggaccccgct gggcacccctg cagggggcca aacatgtcat caactcaact gctgctcaaa
 900
 tgggaagataa aaagcccttt atcctgtctt ccatgaggct tcctctcctg aacaccaaca
 960

gcaaggtgaa gcgggcagtg gtgcaggtga ttagcgccca tggcccacca cggtacctg
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 gagcagcctg gaggtgaggc gatgatcgag taaatcgtgc agcagtgccg gctgcccccc
 1080
 gagcaggagc ctgagaagcc agggcccgcc agcaaggacc ccaaggccga cagcgtgcgg
 1140
 gccatcagcg tgcgcaccct ctacctgtgc agcaccaccg tggcagagat gagtcacgtc
 1200
 ctctggccat acctgtctca gttctctacc cctgtgcgct tcaactggggc cctgactccg
 1260
 ctctgcagga gcctcgtgca tctggcgagc aagaggcagg agggccggggc cgacgccttc
 1320
 ctcaccagt acgacgcccc tgcgagcctc ccgtctcct atgctgtaac cggaagactg
 1380
 ttggttggtg ctccagagcc ctacctaggg gacggagcgt gggcagcgcc gctgcgcctc
 1440
 ctcaagtgtt tgcacccaaa cattcaccct ttgctgggtc agcattggga aacgactgtc
 1500
 ccgctgctgc tgggggtacct ggatgagcac acagaagaga ccctgccaca ggaggagtg
 1560
 gaggagaagc tgttgatggt gaggggccgg gtacggccca tctctggcct taagggtgtg
 1620
 tctggcctgg ggggtgctgg ggtggcagag gctgggccac ctgcctcgac ctacacctgt
 1680
 ggtttggctg gggagccaag gatcaggcag catcaagct gaagacccca gcagcctgtc
 1740
 agcgggggccc ttgctgtgac aaggcaccgg ccctctagca gtccgagccc caagcgtcgg
 1800
 gggaacacct tcacctgccc tggtagacca actgtggcat ggcgtgtccc tgagggttg
 1860
 ctctgcgcgc ccgcggcctcc gctggaaggc ggtctgcagc ccctgcagcc acagcacatg
 1920
 gggatgtgcc caggtccag ccagccctgt gaggggctgg gctcccagcc cctcagtggc
 1980
 atcttggcct cgagttcctg cgagacaccc tggccatcat ttctgacaac gcgt
 2034

<210> 14

<211> 222

<212> PRT

<213> Homo sapiens

<400> 14

Ile	Val	Gln	Gln	Cys	Ala	Leu	Pro	Pro	Glu	Gln	Glu	Pro	Glu	Lys	Pro
1				5					10					15	
Gly	Pro	Gly	Ser	Lys	Asp	Pro	Lys	Ala	Asp	Ser	Val	Arg	Ala	Ile	Ser
			20					25					30		
Val	Arg	Thr	Leu	Tyr	Leu	Val	Ser	Thr	Thr	Val	Asp	Arg	Met	Ser	His
			35					40					45		
Val	Leu	Trp	Pro	Tyr	Leu	Leu	Gln	Phe	Leu	Thr	Pro	Val	Arg	Phe	Thr
	50					55				60					
Gly	Ala	Leu	Thr	Pro	Leu	Cys	Arg	Ser	Leu	Val	His	Leu	Ala	Gln	Lys
	65				70				75					80	
Arg	Gln	Glu	Ala	Gly	Ala	Asp	Ala	Phe	Leu	Ile	Gln	Tyr	Asp	Ala	His

```

      85              90              95
Ala Ser Leu Pro Ser Pro Tyr Ala Val Thr Gly Arg Leu Leu Val Val
      100              105              110
Ser Ser Ser Pro Tyr Leu Gly Asp Gly Arg Gly Ala Ala Ala Leu Arg
      115              120              125
Leu Leu Ser Val Leu His Pro Asn Ile His Pro Leu Leu Gly Gln His
      130              135              140
Trp Glu Thr Thr Val Pro Leu Leu Leu Gly Tyr Leu Asp Glu His Thr
      145              150              155
Glu Glu Thr Leu Pro Gln Glu Glu Trp Glu Glu Lys Leu Leu Met Val
      165              170              175
Arg Ala Gly Val Arg Pro Ile Leu Gly Leu Lys Val Leu Ser Gly Leu
      180              185              190
Gly Gly Ala Gly Val Ala Glu Ala Gly Pro Pro Ala Ser Thr Ser Pro
      195              200              205
Arg Gly Leu Ala Gly Glu Pro Arg Ile Arg Gln His Gln Gly
      210              215              220

```

<210> 15
 <211> 363
 <212> DNA
 <213> Homo sapiens

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<400> 15
naccgcttgc tggctcgcca cggcaaggcg catgtcggtc gcgatattctg caagccggcg
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gtgggttcga tcttgcctc gtgctggaac cagccgatca tggaccggcg gttggtgccg
120
ttgcaggaca ccaatgacac cttcatggcc aacatgcaga agaacggtag ctattcgatc
180
atccccgcga tcgcggcgcg cgagatcacc cgggacaaac tgatcgccct cggcgcggtg
240
gcgaagaaat acgatctgta caccaagatc accggcgccc agcggatcga cctgttcggc
300
gcccagttgc acgaattgcc gcagatctgg ggcgagctgg tggatgcggg attcgagacc
360
ggt
363

```

<210> 16
 <211> 121
 <212> PRT
 <213> Homo sapiens

```

<400> 16
Xaa Ala Leu Leu Ala Arg His Gly Lys Gly His Val Gly Cys Asp Ile
1      5      10      15
Cys Lys Pro Ala Val Gly Ser Ile Leu Ala Ser Cys Trp Asn Gln Pro
20     25     30
Ile Met Asp Pro Ala Leu Val Pro Leu Gln Asp Thr Asn Asp Thr Phe
35     40     45
Met Ala Asn Met Gln Lys Asn Gly Thr Tyr Ser Ile Ile Pro Arg Ile
50     55     60
Ala Gly Gly Glu Ile Thr Pro Asp Lys Leu Ile Ala Leu Gly Ala Val

```

```

65              70              75              80
Ala Lys Lys Tyr Asp Leu Tyr Thr Lys Ile Thr Gly Gly Gln Arg Ile
      85              90              95
Asp Leu Phe Gly Ala Gln Leu His Glu Leu Pro Gln Ile Trp Gly Glu
      100              105              110
Leu Val Asp Ala Gly Phe Glu Thr Gly
      115              120

```

```

<210> 17
<211> 682
<212> DNA
<213> Homo sapiens

```

```

<400> 17
gaattccatt ttgtggagta agaggtgact ggggtatagg gtacaaccca tagccatcca
60
tgttcatctt tgttttgaat ataattggct agaagatata catatatcta tgtaacttcc
120
tctagcatcc tccagtatgg aggctgcatt aagactgcat gaaggagagg gagagaaggg
180
agaaaacagag cagctggaca agaggacagg tatagggaat aagggaagag ccagtaaggg
240
aggaaaagacc ctccgtgaca aaggggcagg gaacagaact caaacattta atggcaggta
300
accagggtta gaatggtaaa ttgaaagggt aatataaagg gagaatgggt aaatgaattt
360
tctgaaatta attgctgtgt ttatagtttt tagccatgca tcggaatcac ctcaggactc
420
cactccaat caattatata tctgggggag gaccaaggcg ttggtatttt tcagaagctc
480
cactgggtgat tctgacagca cagctaggat taagaaactg atcaatggga acagcatgcc
540
tggttcagag gagcttcctt gggaaatgtc acacacagaa catcaatctt ccttccccac
600
tcctgagatc cctcattctt tggcaccagg aacagttgca attagtaaac cctggttccc
660
tgctgtctca caaatcgaa ga
682

```

```

<210> 18
<211> 110
<212> PRT
<213> Homo sapiens

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<400> 18
Met Asn Phe Leu Lys Leu Ile Ala Val Phe Ile Val Phe Ser His Ala
1      5      10      15
Ser Glu Ser Pro Gln Asp Ser Thr Pro Asn Gln Leu Tyr Ile Trp Gly
      20      25      30
Arg Thr Lys Ala Leu Val Phe Phe Arg Ser Ser Thr Gly Asp Ser Asp
      35      40      45
Ser Thr Ala Arg Ile Lys Lys Leu Ile Asn Gly Asn Ser Met Pro Val
      50      55      60
Ala Glu Glu Leu Pro Trp Glu Met Ser His Thr Glu His Gln Ser Ser

```

```

65                               70                               75                               80
Phe Pro Thr Pro Glu Ile Pro His Ser Leu Ala Pro Gly Thr Val Ala
                               85                               90                               95
Ile Ser Lys Pro Trp Phe Pro Ala Val Ser Gln Ile Ala Arg
                               100                               105                               110

```

```

<210> 19
<211> 515
<212> DNA
<213> Homo sapiens

```

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<400> 19
cttggctggc agacatggga cctgcttccc tcttacaccc cagtcttggc aaggatcatg
60
ccccctctc aactatgta gccagtctgg ctgttcactt agtcactaca gtttgcttct
120
cgtctgcagt gcagtcttgg gctataagaa acactgggcc actcaatacc tcccccttt
180
tgccccttct cctcctctgg tccatgggtg gggttggggg gagccagtt tcagcaccag
240
cagctgggag ccataccaca ctcatTTTTT agttctggct gtgggagccc ctccccacag
300
tttcagttcc ccaagcccca ggccctgagtt ttttttattg caaaagctgg ttgtgtgtgt
360
ggctagctcc caggcgtgtg aggtgcagct tgctaagtaa gagctaggaa agagaatagg
420
gtcctgtgtg aggtgtccag tctgaagaa tgccctgggat acttctctcaa gcagttcctt
480
ctcacagctc cctggctgct ccgcatgtca gatct
515

```

```

<210> 20
<211> 130
<212> PRT
<213> Homo sapiens

```

```

<400> 20
Met Gly Pro Ala Ser Leu Leu His Pro Ser Leu Gly Lys Asp His Ala
1      5      10      15
Pro Ile Ser Thr Met Leu Ala Ser Leu Ala Val His Leu Val Thr Thr
20     25     30
Val Cys Phe Ser Ser Ala Val Gln Ser Trp Ala Ile Arg Asn Thr Gly
35     40     45
Pro Leu Asn Thr Ser Pro Leu Leu Ala Leu Leu Leu Trp Ser Met
50     55     60
Gly Gly Val Gly Gly Ser Pro Val Ser Ala Pro Ala Ala Gly Ala His
65     70     75     80
Thr Thr Leu Ile Phe Gln Phe Trp Leu Trp Glu Pro Leu Pro Gln Val
85     90     95
Ser Val Pro Gln Ala Pro Gly Leu Ser Phe Phe Tyr Cys Lys Ser Trp
100    105    110
Leu Leu Leu Trp Leu Ala Pro Arg Arg Val Arg Cys Ser Leu Leu Ser
115    120    125
Lys Ser

```

130

<210> 21
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 21
 gtgcgcacaa aagagcacgt tcgcaagggg aggaagagcg tgccaccggg tctgccgagc
 60
 tagacgcggg gcctatgggt gcggaggacc atggagtga gcgagtaaga ctgatgatg
 120
 caacaaatgt gcttgagggt gaaatggcac gagccagtgc caatgagggc atgacacctg
 180
 ttaaccacga caaataccct tctgtccttt taaatgaagc ggcccaggct tcattactgg
 240
 atacaatgac tgcttgacct gatgggttca caattgagca attggagctt acacgatctc
 300
 tatgttatga aagagtatta gcacatcgat cctcatggga tcgttcagcc ctggctcaag
 360
 aattaaagca agttgtccaa ggcattccatn
 390

<210> 22
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 22
 Met Val Ala Glu Asp His Gly Val Lys Arg Val Arg Leu Asp Asp Ala
 1 5 10 15
 Thr Asn Val Pro Glu Gly Glu Met Ala Arg Ala Ser Ala Asn Glu Gly
 20 25 30
 Met Thr Pro Val Asn His Asp Lys Tyr Pro Ser Val Leu Leu Asn Glu
 35 40 45
 Ala Ala Gln Ala Ser Leu Leu Asp Thr Met Thr Ala Cys Thr Asp Gly
 50 55 60
 Phe Thr Ile Glu Gln Leu Glu Leu Thr Arg Ser Leu Cys Tyr Glu Arg
 65 70 75 80
 Val Leu Ala His Arg Ser Ser Trp Asp Arg Ser Ala Leu Ala Gln Glu
 85 90 95
 Leu Lys Gln Val Val Gln Gly Ile His
 100 105

<210> 23
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 23
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 ctgggcctgt tcgccgtgct gctgtcctgc tcgccctcgg ccatgtacac cagcgtggag
 120

ggctgggact acgtggactc gctctacttc tgcttcgtca ccttcagcac catcggcttc
 180
 ggggacctgg tgagcagcca gcacgccgcc taccggaacc aggggctcta ccgcctgggc
 240
 aacttctctt tcactctgct cggcgtgtgc tgcatttact cgctcttcaa cgctcatctc
 300
 atcctcatca agcaggtgct caactggatg ctgcgcaagc tgagctgccg ctgctgcgcg
 360
 cgctgctgcc cggtctctgg cgcgc
 385

<210> 24
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 24
 Xaa Ser Glu Ala Asp Ser Leu Ala Gly Trp Lys Pro Ser Val Tyr His
 1 5 10 15
 Val Leu Leu Ile Leu Gly Leu Phe Ala Val Leu Leu Ser Cys Cys Ala
 20 25 30
 Ser Ala Met Tyr Thr Ser Val Glu Gly Trp Asp Tyr Val Asp Ser Leu
 35 40 45
 Tyr Phe Cys Phe Val Thr Phe Ser Thr Ile Gly Phe Gly Asp Leu Val
 50 55 60
 Ser Ser Gln His Ala Ala Tyr Arg Asn Gln Gly Leu Tyr Arg Leu Gly
 65 70 75 80
 Asn Phe Leu Phe Ile Leu Leu Gly Val Cys Cys Ile Tyr Ser Leu Phe
 85 90 95
 Asn Val Ile Ser Ile Leu Ile Lys Gln Val Leu Asn Trp Met Leu Arg
 100 105 110
 Lys Leu Ser Cys Arg Cys Cys Ala Arg Cys Cys Pro Ala Pro Gly Ala
 115 120 125

<210> 25
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 25
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 60
 aggagggggag ttcccagctc tgtatttttg aagggtcagt ctgtgtgctt ggaccagtga
 120
 ggagcccgct gggatccaga ctcgagtggg tggagccggg gcaggtggga gcagagacac
 180
 tggaggaaag ctggctgaat gcactgtgta ttggaggca gaaccagcag agggctctct
 240
 gggttgagtg tagggcaaaa gagaaagaag gcaccaagcc tggggtcttg gttttctctc
 300
 ttacacttgc tgggtggacg gtggtgccac tgaatga
 337

<210> 26

<211> 111
 <212> PRT
 <213> Homo sapiens

<400> 26
 Met Gly Glu Thr Val His Phe Leu Leu Gly Leu Arg Gly Lys Ser Leu
 1 5 10 15
 Gln Ser Phe Glu Glu Gly Ser Ser Gln Leu Cys Ile Phe Glu Gly Ser
 20 25 30
 Val Leu Leu Leu Gly Pro Val Arg Ser Pro Val Gly Ser Arg Leu Glu
 35 40 45
 Trp Val Glu Pro Gly Gln Val Gly Ala Glu Thr Leu Glu Glu Ser Trp
 50 55 60
 Ser Asn Ala Leu Cys Ile Trp Arg Gln Asn Gln Gln Arg Val Leu Trp
 65 70 75 80
 Val Glu Cys Arg Ala Lys Glu Lys Glu Gly Thr Lys Pro Gly Val Trp
 85 90 95
 Val Phe Ser Leu Thr Leu Ala Gly Trp Thr Val Val Pro Leu Asn
 100 105 110

<210> 27
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 27
 ccgacgtcga atatccatgc agcgcgcgcg aggatggaga gagcgatgga gcaactcaac
 60
 cgccctgacgc gctcgctgcg ccgcgcgcgc accgtggagt tgcccaggga taatgaaact
 120
 gctgtttata cattaatgcc aatggttatg gctgatcaac acaggctctgt ttctgaacta
 180
 ctatcaaatt caaaatttga tgtcaattat gcattcggac gtgtgaaaag aagcttgctt
 240
 cacattgcag caaattgtgg atcggtggaa tgcttggttt tgctgttaaa gaaaggagca
 300
 aatcctaact atcaagatat ttcaggctgt aca
 333

<210> 28
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 28
 Pro Thr Ser Asn Ile His Ala Ala Pro Arg Met Glu Arg Ala Met
 1 5 10 15
 Glu Gln Leu Asn Arg Leu Thr Arg Ser Leu Arg Arg Ala Arg Thr Val
 20 25 30
 Glu Leu Pro Glu Asp Asn Glu Thr Ala Val Tyr Thr Leu Met Pro Met
 35 40 45
 Val Met Ala Asp Gln His Arg Ser Val Ser Glu Leu Leu Ser Asn Ser
 50 55 60
 Lys Phe Asp Val Asn Tyr Ala Phe Gly Arg Val Lys Arg Ser Leu Leu

```

65              70              75              80
His Ile Ala Ala Asn Cys Gly Ser Val Glu Cys Leu Val Leu Leu Leu
85
Lys Lys Gly Ala Asn Pro Asn Tyr Gln Asp Ile Ser Gly Cys Thr
100              105              110

```

<210> 29
 <211> 375
 <212> DNA
 <213> Homo sapiens

```

<400> 29
ncgccgtccg tgctggctat tatgacggcg ggtagcgacc agggcgagga ggtcaactcg
60
gagagctatt tgagcgccgt gacgccgctg agtcccaag agattcgta gctgccccgc
120
tacaatatca cgatcaagcg cgctcgtgaac atgacgggca agggccgcac gccgagctgg
180
tactcgctcg tcgtggctgg caatggctcgg ggcctcgtgg gctatggcga aggcaaatag
240
actaacatca gccgcgcgaa caaaaaggcg ttccacgccg cggtgaaaaa catggacttg
300
gtatcggtcc accggtcgaa gagtggcgcc aacacgctcg agccccccgt cgagggccgc
360
tggggcgcta cgcgt
375

```

<210> 30
 <211> 125
 <212> PRT
 <213> Homo sapiens

```

<400> 30
Xaa Pro Ser Val Leu Ala Ile Met Thr Ala Gly Ser Asp Gln Gly Glu
1      5      10      15
Glu Val Asn Ser Glu Ser Tyr Leu Ser Ala Val Thr Pro Leu Ser Pro
20      25      30
Lys Glu Ile Arg Gln Leu Pro Arg Tyr Asn Ile Thr Ile Lys Arg Val
35      40      45
Val Asn Met Thr Gly Lys Gly Arg Thr Pro Ser Trp Tyr Ser Leu Val
50      55      60
Val Ala Gly Asn Gly Arg Gly Leu Val Gly Tyr Gly Glu Gly Lys Asp
65      70      75      80
Thr Asn Ile Ser Arg Ala Asn Lys Lys Ala Phe His Ala Ala Val Lys
85      90      95
Asn Met Asp Leu Val Ser Val His Arg Ser Lys Ser Gly Ala Asn Thr
100      105      110
Leu Glu Pro Pro Val Glu Gly Arg Trp Gly Ala Thr Arg
115      120      125

```

<210> 31
 <211> 375
 <212> DNA
 <213> Homo sapiens

```

<400> 31
accggctcttg gcctcagctt tgctctgaaa ttgaagtcgg tgccaaaagt ggggaagagc
60
ggggagcaggc acttacgagc ctgcgcgtca gggatgcttc ctggggccctc gagagtgcag
120
agattccttg atccagagct gcggctgggc ggctgcagct gcgcctggga gtgcagggct
180
ccgcacctgc cagctcaaaa ggaaatgggg gctcctgcct gttcctggct cctgttggcc
240
ctgcagagtg cacaaacctt gccgcgcttc ctccactgca gcttacgtct ttgcagcagc
300
cactccccgat gggctgccac tgccatctgt gagaccataa tgtgtgcaat ttgagactca
360
tggcctgcat tgttt
375

```

```

<210> 32
<211> 118
<212> PRT
<213> Homo sapiens

```

```

<400> 32
Met Gln Ala Met Ser Leu Lys Leu His Thr Leu Trp Ser His Arg Trp
1 5 10 15
Gln Trp Gln Pro Ile Gly Ser Gly Cys Cys Lys Asp Val Ser Cys Ser
20 25 30
Gly Gly Ser Ala Ala Arg Phe Val His Ser Ala Gly Pro Thr Gly Ala
35 40 45
Arg Asn Arg Gln Glu Pro Pro Phe Pro Phe Glu Leu Ala Gly Arg Glu
50 55 60
Pro Cys Thr Pro Arg Arg Ser Cys Ser Arg Pro Ala Ala Ala Leu Asp
65 70 75 80
Pro Gly Ile Ser Ala Leu Ser Gly Ala Gln Glu Ala Ser Leu Thr Arg
85 90 95
Arg Leu Val Ser Ala Cys Ser Arg Ser Ser Pro Leu Leu Ala Pro Thr
100 105 110
Ser Ile Ser Glu Gln Ser
115

```

```

<210> 33
<211> 351
<212> DNA
<213> Homo sapiens

```

```

<400> 33
ccatgcagcc caaccgttgg cgataaagtc cgttttagcg ataccaattt atgggcaacc
60
attgaacaag atttattaac caaagggtgat gagtgtaaat ttgggtggcg taaaagtgtg
120
cgtgatggta tggcgcaaag cggcaccgca actcgcgaca atccaaatgt attggatttt
180
gtgattacca atgtgatgat cattgatgcc aaattaggca ttatcaaaag cgatattggg
240

```

attcgcgatg gtcgtattgt cggatcggga caagcaggta accctgacac catggatgac
 300
 gtcacgccaac acatgattat cgggtgctagc acagaagtac ataacggtgc a
 351

<210> 34
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 34
 Pro Cys Ser Pro Thr Val Gly Asp Lys Val Arg Leu Gly Asp Thr Asn
 1 5 10 15
 Leu Trp Ala Thr Ile Glu Gln Asp Leu Leu Thr Lys Gly Asp Glu Cys
 20 25 30
 Lys Phe Gly Gly Gly Lys Ser Val Arg Asp Gly Met Ala Gln Ser Gly
 35 40 45
 Thr Ala Thr Arg Asp Asn Pro Asn Val Leu Asp Phe Val Ile Thr Asn
 50 55 60
 Val Met Ile Ile Asp Ala Lys Leu Gly Ile Ile Lys Ala Asp Ile Gly
 65 70 75 80
 Ile Arg Asp Gly Arg Ile Val Gly Ile Gly Gln Ala Gly Asn Pro Asp
 85 90 95
 Thr Met Asp Asp Val Thr Pro Asn Met Ile Ile Gly Ala Ser Thr Glu
 100 105 110
 Val His Asn Gly Ala
 115

<210> 35
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 35
 nnctagctg caccaccacc tgttcacgca ggcagagcgg ccaccctca tggagaaga
 60
 ggaatccact gtattgggca caggcttccct gctggacctt ggcaagcagg tgcttggtctg
 120
 gtaccaggaa gtccagcgtg tacctcagtg cgtcctcccg ataagtcctc tccaccacct
 180
 ggaacacctg gcccaacagg gtgggggctg ttgcctcaaa ggggtggatc agggcggcga
 240
 gagtgcctctg cacacagtcc tccactggct cagggtccat ggctcggcgc cgggcgcgct
 300
 ccgacgcttg gtcggggcgg cggggccggg cgcgccaccg cctcccttca cgcgt
 355

<210> 36
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 36
 Xaa Leu Ala Ala Pro Pro Pro Val His Ala Gly Arg Ala Ala Thr Pro

```

      1             5             10             15
His Gly Arg Arg Gly Ile His Cys Ile Gly His Arg Leu Pro Ala Gly
      20             25             30
Pro Trp Gln Ala Gly Ala Trp Leu Val Pro Gly Ser Pro Ala Cys Thr
      35             40             45
Ser Val Arg Pro Pro Asp Lys Ser Ser Pro Pro Pro Gly Thr Pro Gly
      50             55             60
Pro Thr Gly Trp Gly Leu Leu Pro Gln Arg Val Asp Thr Gly Arg Arg
      65             70             75
Glu Cys Ser Ala His Ser Pro Pro Leu Ala Gln Ala Pro Trp Leu Gly
      85             90             95
Ala Gly Pro Arg Pro Thr Leu Gly Arg Ala Gly Gly Ala Gly Arg Ala
      100            105            110
Thr Ala Ser Leu His Ala
      115

```

<210> 37
 <211> 492
 <212> DNA
 <213> Homo sapiens

```

<400> 37
acgcgtggcc ttcgtctgcc accaggacgc actcagcccc accgggtttc cggaccgcgc
60
gcaaccatga caagggcgat gttgtgatct ggggtggattc cttctccgac atgctcgagg
120
gatcggtatct ctccggcgta gtcacggtgc ttgccgaggc cggctatcgc ccaagggttc
180
tcgccgacga cgtctgctgc ggggtgacgt ggatcactac cggtcagctc gacggtgctc
240
ggcgtcgggt gcgcgtggt ctgcacgtgc tggcaccctc gtcagacgcc agcgtccag
300
tcgttgggct agagccgtcc tgcactaccg tctggcgtga tgacgcactc gcctcctgc
360
cagatgatcc gcgcgtccac cgggtagcca gaaacatgca taccgtcgcc gagatgcttg
420
aggcagcaca gtggacccca ccctcgctag caggccacac cctcgtcgct cagcccccatt
480
gtcatcccg gg
492

```

<210> 38
 <211> 127
 <212> PRT
 <213> Homo sapiens

```

<400> 38
Met Leu Glu Gly Ser Asp Leu Ser Ala Val Val Thr Val Leu Ala Glu
      1             5             10             15
Ala Gly Tyr Arg Pro Arg Val Leu Ala Asp Asp Val Cys Cys Gly Leu
      20             25             30
Thr Trp Ile Thr Thr Gly Gln Leu Asp Gly Ala Arg Arg Arg Leu Arg
      35             40             45
Ala Gly Leu Asp Val Leu Ala Pro Leu Ser Asp Ala Ser Val Pro Val

```

```

      50              55              60
Val Gly Leu Glu Pro Ser Cys Thr Thr Val Trp Arg Asp Asp Ala Leu
65              70              75
Arg Leu Leu Pro Asp Asp Pro Arg Val His Arg Val Ala Arg Asn Met
      85              90              95
His Thr Val Ala Glu Met Leu Glu Ala Ala Gln Trp Thr Pro Pro Ser
      100              105              110
Leu Ala Gly His Thr Leu Val Ala Gln Pro His Cys His Pro Ala
      115              120              125

```

<210> 39
 <211> 412
 <212> DNA
 <213> Homo sapiens

```

<400> 39
aacgaaggtn cgcgtacgcgc tctgaaagcc ctgcgtaaaag agcgttccga tcgcggggaa
60
gtgatgngca cgcctaaaat gcaggtgggtc gaagccgcga gttcaggcaa gattgtcttt
120
gaaatggaag acgtttatta cagcattgcc ggaaaacaac tggtagagcaa cttctctgcy
180
caagtcacgc gtggtgataa aattgcgctg attgcccga acggttggg taaaacgacg
240
ttgctgaaac tgatgttaag taagattcag gcagacagcg gccgtgttca ctgcggtact
300
aaactggaag ttgcgtactt cgaccagcac cgtgctgagc tggatcctga cgcgtacggtg
360
atggataacc tggccgaagg taagcaggaa gtgatggtaa atggccgtgt an
412

```

<210> 40
 <211> 137
 <212> PRT
 <213> Homo sapiens

```

<400> 40
Asn Glu Gly Xaa Val Arg Ala Leu Lys Ala Leu Arg Lys Glu Arg Ser
1              5              10              15
Asp Arg Arg Glu Val Met Xaa Thr Ala Lys Met Gln Val Val Glu Ala
      20              25              30
Ala Ser Ser Gly Lys Ile Val Phe Glu Met Glu Asp Val Tyr Tyr Ser
      35              40              45
Ile Ala Gly Lys Gln Leu Val Ser Asn Phe Ser Ala Gln Val Met Arg
      50              55              60
Gly Asp Lys Ile Ala Leu Ile Gly Pro Asn Gly Cys Gly Lys Thr Thr
65              70              75
Leu Leu Lys Leu Met Leu Ser Lys Ile Gln Ala Asp Ser Gly Arg Val
      85              90              95
His Cys Gly Thr Lys Leu Glu Val Ala Tyr Phe Asp Gln His Arg Ala
      100              105              110
Glu Leu Asp Pro Glu Arg Thr Val Met Asp Asn Leu Ala Glu Gly Lys
      115              120              125
Gln Glu Val Met Val Asn Gly Arg Val

```

130

135

<210> 41
 <211> 1080
 <212> DNA
 <213> Homo sapiens

<400> 41
 gaattcaagt ggacacaggc tccacgcccc cgtctcaccg ataagagcta caagcacaaac
 60
 tactatgacg agcgggtttc gctcgaagag cgtcttgagc gcaactgtggc taaggatttc
 120
 gtcacgacgg aggtcgagcc catgtgggat gcggctgatg tcatgctgat gggtaaggat
 180
 ctcttcatcc agcacggtct gacgacaaat cggaaagtcaa tggagtgggt taagcggttac
 240
 taccgccgatt tccgcgttca cgcggtgaat ttcctggggg atccgtaccc gatccatc
 300
 gacgcgacct ttgtgccgct tcgtccgggg ctccatcatca acaaccgaa tcgtccactg
 360
 ccgcaggagc agaggaagat ctccgagggc aatgactggc agatcgttga tgcgtctcag
 420
 ccggcgccacg acacgcctcc agaattgtgc tactcgtctg tgtggctatc aatgaactgc
 480
 ttgttacttg atccgaagac ggtcatctgc gaggcttcgg aagttcatca gatggagcag
 540
 atggacaagc tgggtatgaa cgtcatcccg gtgccttccc gtgacgcgta cccattcggt
 600
 ggaggtctcc actgcgccac agctgatgta tatcgcaag gtacctgtga ggactacttc
 660
 ccgaatcagg tcgacgaccc gaccttgggt tgagaaaacc ccgtgggtcat gtcagtactg
 720
 acggatctcg gtggctcggt acggaactta cgttgcctgt taccggggcg ccgggtctga
 780
 tatggcagta tcacgcctag caaaaaggag catgtcatgg acatggagcc gggcatcatc
 840
 aacgtcaaac aggaagttcc aggcgtcggt acgatgaacc agaaagtggg attcgtgtcc
 900
 atgcttcttt ctgcaacggg tatggggttg gtgggtactt tcgggcgtct cagcactcct
 960
 gtggatccca cgcgggcgag taagtacatc atcggtgatt ttttggccac tggtaggatg
 1020
 atagtcgggg tcctgggatt tctgcttatt atcgtcatc atggaaaatg gtctgagctc
 1080

<210> 42
 <211> 230
 <212> PRT
 <213> Homo sapiens

<400> 42
 Glu Phe Lys Trp Thr Gln Ala Pro Arg Pro Arg Leu Thr Asp Lys Ser
 1 5 10 15
 Tyr Lys His Asn Tyr Tyr Asp Glu Arg Val Ser Leu Glu Glu Arg Leu

```

      20      25      30
Glu Arg Thr Val Ala Lys Asp Phe Val Thr Thr Glu Val Glu Pro Met
      35      40      45
Trp Asp Ala Ala Asp Val Met Arg Met Gly Lys Asp Leu Phe Ile Gln
      50      55      60
His Gly Leu Thr Thr Asn Arg Lys Ser Met Glu Trp Phe Lys Arg Tyr
      65      70      75      80
Tyr Pro Asp Phe Arg Val His Ala Val Asn Phe Pro Gly Asp Pro Tyr
      85      90      95
Pro Ile His Ile Asp Ala Thr Phe Val Pro Leu Arg Pro Gly Leu Ile
      100      105      110
Ile Asn Asn Pro Asn Arg Pro Leu Pro Gln Glu Gln Arg Lys Ile Phe
      115      120      125
Glu Ala Asn Asp Trp Gln Ile Val Asp Ala Ala Gln Pro Ala His Asp
      130      135      140
Thr Pro Pro Glu Leu Cys Tyr Ser Ser Val Trp Leu Ser Met Asn Cys
      145      150      155
Leu Val Leu Asp Pro Lys Thr Val Ile Cys Glu Ala Ser Glu Val His
      160      165      170      175
Gln Met Glu Gln Met Asp Lys Leu Gly Met Asn Val Ile Pro Val Ala
      180      185      190
Phe Arg Asp Ala Tyr Pro Phe Gly Gly Gly Leu His Cys Ala Thr Ala
      195      200      205
Asp Val Tyr Arg Glu Gly Thr Cys Glu Asp Tyr Phe Pro Asn Gln Val
      210      215      220
Asp Asp Pro Thr Leu Val
      225      230

```

<210> 43
 <211> 358
 <212> DNA
 <213> Homo sapiens

```

<400> 43
gggccccca catagtggac acaggtttct gggatgtcag catggagtgc caagaggtgg
60
gtgaccacct ggtggggaat aaggcgcttc tgggacatag aggctgcctt ccagctgcgc
120
ctggcagagc tgttgacaca acagcatggt ctgcagtgcc gggccactgc cagcacacc
180
gatgtccttt aaggatggat ttgggttttc ggattcgcgt ggcctatcag cgggagtcce
240
agatcctgaa ggaagtgcag agcccagagg ggaatgatctc gctgaggggac acagctgcct
300
ccctccgcct tgagagagac acaaggcagt tgccactgct caccagtgcc ctgcacgn
358

```

<210> 44
 <211> 105
 <212> PRT
 <213> Homo sapiens

```

<400> 44
Met Glu Cys Gln Glu Val Gly Asp His Leu Val Gly Asn Lys Ala Leu

```


1	5	10	15
Leu Gly His	Arg Gly Cys Leu	Pro Ala Ala Pro	Gly Arg Ala Val Asp
	20	25	30
Thr Thr Ala	Trp Ser Ala Val	Pro Gly His Cys	His Ala His Arg Cys
	35	40	45
Pro Leu Arg	Met Asp Leu Gly	Phe Arg Ile Arg	Val Ala Tyr Gln Arg
	50	55	60
Glu Ser Gln	Ile Leu Lys Glu	Val Gln Ser Pro	Glu Gly Met Ile Ser
	65	70	75
Leu Arg Asp	Thr Ala Ala Ser	Leu Arg Leu Glu	Arg Asp Thr Arg Gln
	85	90	95
Leu Pro Leu	Leu Thr Ser Ala	Leu His	
	100	105	

<210> 45

<211> 905

<212> DNA

<213> Homo sapiens

<400> 45

gtcgacgata aaggagtatt tgcgcagcag cagtatgatg ctctcgttga ggcgggtttc
 60
 gcggctcctg gaatcccaga gcagtatggt ggcgacgggt cggatgcgat tgcgtccgca
 120
 ataatcatgg aagaggtcgc tcgagtcctgt gcgtcgtcgt ccaccgtcat atcgtccaat
 180
 gagcttggta cgcgtccctct cctcaaatac ggtagcgagg agcagaggaa acgttatctt
 240
 tctgaagtgg cttcgggtaa ggcacttttc ggatatgcgc tctccgaggg tgatgctgga
 300
 tcagatccag ctgcacttaa gtgtcagagcc gacgaagatg gggacagttt cgtcctgaat
 360
 ggcggttaagg cttgggtcac ggaggctggc gaggccaagt acctggtgat atttgcggtt
 420
 actgacccag acgatccgcg ccacagaatc agcgcgttga tggtccatgc agatgacccg
 480
 ggcattagct acggggctcc ggagcacaaa atggggatac gcggttcagt taccagggaa
 540
 gtggttttca agaatacgcg tatccccaag gaacgagtaa ttggccgtcg agggcacggt
 600
 ctgagtggtt ctctaggtac gcttgataac ctctcgtgtct cgattgtctgc tcaagcagtg
 660
 ggaattgtccc aaggagcttt agacattgcc acggattacg tccagaagcg caagcagttt
 720
 ggccagccac tgtccaattt tgagggaatc cagttcatgc tcgcagacat ggcaatgcgt
 780
 ttggaggcgg cgcgagcgt gacatactct gcagctgacg gtagtgggag ccagactgac
 840
 gatgtgagtt acttcggcgc ggccggccaaa tgtttcgtct ccgacacagc gatggcagtg
 900
 tgcac
 905

<210> 46

<211> 301
 <212> PRT
 <213> Homo sapiens

<400> 46
 Val Asn Asp Lys Gly Val Phe Ala Gln Gln Gln Tyr Asp Ala Leu Val
 1 5 10 15
 Glu Ala Gly Phe Ala Ala Pro Gly Ile Pro Glu Gln Tyr Gly Asp
 20 25 30
 Gly Ala Asp Ala Ile Ala Ser Ala Ile Ile Met Glu Glu Val Ala Arg
 35 40 45
 Val Cys Ala Ser Ser Ser Thr Val Ile Ser Ser Asn Glu Leu Gly Thr
 50 55 60
 Val Pro Leu Leu Lys Tyr Gly Ser Glu Glu Gln Arg Lys Arg Tyr Leu
 65 70 75 80
 Ser Glu Val Ala Ser Gly Lys Ala Leu Phe Gly Tyr Ala Leu Ser Glu
 85 90 95
 Ala Asp Ala Gly Ser Asp Pro Ala Ala Leu Lys Cys Arg Ala Asp Glu
 100 105 110
 Asp Gly Asp Ser Phe Val Leu Asn Gly Val Lys Ala Trp Val Thr Glu
 115 120 125
 Ala Gly Glu Ala Lys Tyr Leu Val Ile Phe Ala Val Thr Asp Pro Asp
 130 135 140
 Asp Pro Arg His Arg Ile Ser Ala Leu Met Val His Ala Asp Asp Pro
 145 150 155 160
 Gly Ile Ser Tyr Gly Ala Pro Glu His Lys Met Gly Ile Arg Gly Ser
 165 170 175
 Val Thr Arg Glu Val Val Phe Lys Asn Thr Arg Ile Pro Lys Glu Arg
 180 185 190
 Val Ile Gly Arg Arg Gly His Gly Leu Ser Val Ala Leu Gly Thr Leu
 195 200 205
 Asp Asn Ser Arg Val Ser Ile Ala Ala Gln Ala Val Gly Ile Ala Gln
 210 215 220
 Gly Ala Leu Asp Ile Ala Thr Asp Tyr Val Gln Lys Arg Lys Gln Phe
 225 230 235 240
 Gly Gln Pro Leu Ser Asn Phe Glu Gly Ile Gln Phe Met Leu Ala Asp
 245 250 255
 Met Ala Met Arg Leu Glu Ala Ala Arg Ala Leu Thr Tyr Ser Ala Ala
 260 265 270
 Asp Arg Ser Gly Arg Gln Thr Asp Asp Val Ser Tyr Phe Gly Ala Ala
 275 280 285
 Ala Lys Cys Phe Ala Ser Asp Thr Ala Met Ala Val Cys
 290 295 300

<210> 47
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 47
 aagctgttag agctagtccg aagcggactg tcggtacgcc aagctgctaa aagatgtggg
 60
 atgcatttta ccgctgcgta tgccgtagct acggaagctg ggtgccatat ccggttaagt
 120

cagtatgctc ggaaagtccg ccagacgcag ttaagagtgg aatacctgcg ccttcggctg
 180
 gcgagcctgc ctgggtgtga tgctggcgcg gcagtaggaa ttgatcgctg actgcgttta
 240
 gatttcgaaa aaggaactcac caaatcccag ggtcgacgag aagagtccat acccgctggc
 300
 gaagacgccca gcacgtataa cagacttatg aaagcgctgc gccaacgccca tgatgtcatc
 360
 aaatccggaa agcttgccc
 379

<210> 48
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 48
 Met His Leu Thr Ala Ala Tyr Ala Val Ala Thr Glu Ala Gly Cys His
 1 5 10 15
 Ile Arg Leu Ser Gln Tyr Ala Arg Lys Val Arg Gln Thr Gln Leu Arg
 20 25 30
 Val Glu Tyr Leu Arg Leu Arg Leu Ala Ser Leu Pro Gly Gly Asp Ala
 35 40 45
 Gly Ala Ala Val Gly Ile Asp Arg Arg Leu Arg Leu Asp Phe Glu Lys
 50 55 60
 Gly Leu Thr Lys Ser Gln Gly Arg Arg Glu Glu Phe Ile Pro Val Gly
 65 70 75 80
 Glu Asp Ala Ser Thr Tyr Asn Arg Leu Met Lys Ala Leu Arg Gln Arg
 85 90 95
 His Asp Val Ile Lys Ser Gly Lys Leu Ala
 100 105

<210> 49
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 49
 tgatcatgat gctggcatgg actattctgg tcctgtgtcc tctctcacct gctgaaggac
 60
 atccctctaa tttttgtgct tccttctgta tcatcaaatt ttccctctct actgagtctc
 120
 ttgcattccc ttggaagcat gctgtactat gtcccatcct taaagaactc cccctgtctg
 180
 cacattaccc tctgccagct ggctcatttt tctgctcccc ttacagggga aactcttcaa
 240
 aaagtattct ccacctcctt ccatctcatg ttctcttgaa cctgcagtac tgggtgctcc
 300
 ctccctttg
 309

<210> 50
 <211> 101
 <212> PRT

<213> Homo sapiens

<400> 50

```

Met Met Leu Ala Trp Thr Ile Leu Val Pro Val Pro Leu Ser Pro Ala
 1             5             10             15
Glu Gly His Pro Ser Asn Phe Cys Val Ser Phe Cys Ile Ile Lys Phe
      20             25             30
Ser Leu Ser Thr Glu Ser Leu Ala Ser Pro Trp Lys His Ala Val Leu
      35             40             45
Cys Pro Ile Leu Lys Glu Leu Pro Leu Ser Ala His Tyr Pro Leu Pro
      50             55             60
Ala Gly Ser Phe Phe Cys Ser Pro Leu Gln Gly Asn Ser Ser Lys Ser
      65             70             75             80
Tyr Leu His Leu Leu Pro Ser His Val Leu Leu Asn Leu Gln Tyr Trp
      85             90             95
Val Leu Pro Pro Phe
      100

```

<210> 51

<211> 512

<212> DNA

<213> Homo sapiens

<400> 51

```

agatctttga agaattgccca cactgtcttc ctccctgctt ataatttctt tattccctag
60
gatgtgatcc ttgttcttgg ggccctcacat ggcagctgga tctctggcga ttgcatctga
120
gtccagaca ccaggatgga aaagaaaaga aggaggggca agaggaaccc ccagatgctc
180
cttaagagct actgcgtggc attccactt gcatctcatt tgctcgatcg ctgtcactgt
240
gccctaacga gctgcaagga cactggggaa atgagtctgt cttgtacttc atgtgccctt
300
caaaatcttc tggtgctgag ggagaagagg ccagccggta ttgaggaaca actagcactt
360
tctgcttccg cgtcccaggg ggacgtgggt gtgttgaatc cacaccgggg gtgcggacct
420
ctgaggctgg gctggatggg acatcaggtg ggccctctgt ttcatttatg tgacctccca
480
tcaggctcttc tggttggatc ctgctttcta ga
512

```

<210> 52

<211> 125

<212> PRT

<213> Homo sapiens

<400> 52

```

Met Glu Lys Lys Arg Arg Arg Gly Lys Arg Asn Pro Gln Met Leu Leu
 1             5             10             15
Lys Ser Tyr Cys Val Ala Phe Pro Leu Ala Ser His Leu Leu Asp Arg
      20             25             30
Cys His Cys Ala Leu Thr Ser Cys Lys Asp Thr Gly Glu Met Ser Leu

```

```

          35              40              45
Ser Cys Thr Ser Cys Ala Pro Gln Asn Leu Leu Leu Arg Glu Lys
  50              55              60
Arg Pro Ala Gly Ile Glu Glu Gln Leu Ala Leu Ser Ala Ser Ala Ser
  65              70              75              80
Gln Gly Asp Val Gly Val Leu Asn Pro His Arg Gly Cys Gly Pro Leu
          85              90              95
Arg Leu Gly Trp Met Gly His Gln Val Gly Pro Leu Phe His Leu Cys
          100              105              110
Asp Leu Pro Ser Gly Leu Leu Val Gly Ser Cys Phe Leu
          115              120              125

```

<210> 53

<211> 474

<212> DNA

<213> Homo sapiens

<400> 53

```

accggtacac ctacgtcacc cgtaaaaacc gacgcaatac ccggatcgcc tcgtctctcaa
  60
aaaattcgat cccgtcgtgc gtcgtcacat tgagttcaag gaggcccgcct aatggccaaa
  120
aagtccaaga ttgtcgccca gaagaaacgt gagaagctcg tagcccaata cgccgaaagg
  180
cgcgccgaac tcaaggccat catgaagtgc ccaactgcct cattggacga acgcatggag
  240
gcatcgcgta agctgtctcg cctgcgcgcg gattcatccc ccgtgcgggtt acgtaaccgt
  300
gaccaagtgc acggggcgctcc ccgcggctac gttggcaagg ccggtgtgtc ccgtatccgt
  360
ttccgtgaga tggcccaccg cggcgaactc cccggaatcg cgaagtcaag ctggtgaagc
  420
catggcagta ccgaagcgaa agaagtcccg ttcgaccacg cgcatatggc gggc
  474

```

<210> 54

<211> 101

<212> PRT

<213> Homo sapiens

<400> 54

```

Met Ala Lys Lys Ser Lys Ile Val Ala Gln Lys Lys Arg Glu Lys Leu
  1              5              10              15
Val Ala Gln Tyr Ala Glu Arg Arg Ala Glu Leu Lys Ala Ile Met Lys
          20              25              30
Cys Pro Thr Ala Ser Leu Asp Glu Arg Met Glu Ala Ser Arg Lys Leu
          35              40              45
Ser Arg Leu Pro Arg Asp Ser Ser Pro Val Arg Leu Arg Asn Arg Asp
          50              55              60
Gln Val Asp Gly Arg Pro Arg Gly Tyr Val Gly Lys Ala Gly Val Ser
          65              70              75              80
Arg Ile Arg Phe Arg Glu Met Ala His Arg Gly Glu Leu Pro Gly Ile
          85              90              95
Ala Lys Ser Ser Trp

```

100

<210> 55
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 55
 ccatggccca ggacagcgg catatcggct acgactacgg tacaccgggtg gcgccacagt
 60
 tcggcgcgagc caagcccgca gcgtgctgcc aggcgcaagc gacaaacacc ggcccggtggg
 120
 tggtgttcga ccatgtgcgt tgcacccacg acacctttct gatcgacgtc tttctcaacc
 180
 agcccgatgc caccgcgcag caggtcaatg ccgacaaccc gcactacgtc gggcggttca
 240
 gccgcacatgc catgggcctg gtggatgaca agggccggtg cattaccagc ggcgtatcgc
 300
 gcgcgttgaa tgcggcgcg agcaccaagg cgctgaacct gggaccgagt gacgcggcgc
 360
 agttatcggg gaggcgta
 378

<210> 56
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 56
 Met Ala Gln Asp Ser Arg His Ile Gly Tyr Asp Tyr Gly Thr Pro Val
 1 5 10 15
 Ala Pro Gln Phe Gly Ala Ala Lys Pro Ala Ala Cys Cys Gln Ala Gln
 20 25 30
 Ala Thr Asn Thr Gly Pro Trp Val Val Phe Asp His Val Arg Cys Thr
 35 40 45
 His Asp Thr Phe Leu Ile Asp Val Phe Leu Asn Gln Pro Asp Ala Thr
 50 55 60
 Ala Gln Gln Val Asn Ala Asp Asn Pro His Tyr Val Gly Arg Phe Ser
 65 70 75 80
 Arg Ile Gly Met Gly Leu Val Asp Asp Lys Gly Arg Cys Ile Thr Gln
 85 90 95
 Gly Val Ser Arg Ala Leu Asn Ala Ala Arg Ser Thr Lys Ala Leu Asn
 100 105 110
 Leu Gly Pro Ser Asp Ala Ala Gln Leu Ser Val Arg Arg
 115 120 125

<210> 57
 <211> 388
 <212> DNA
 <213> Homo sapiens

<400> 57
 agacccccc gacacagatc aggagtcgtc atgtccagaa agaagaaggc cggcatcctc
 60

accgcaggcg gtgattgccc cgggctcaac gccgctatcc gcggatttgg caaggtgcc
 120
 atccgccagc acgacatgga gctcatcggt attcaggacg gctttcttgg attggcggga
 180
 aaccgcacca tctcccttgg cccgcgtgcc ctctcaggga tcttgacggt cggcgggacc
 240
 atctctggaa ctagcgtga caaggtcaat cacatgatta tcgacggcga ggaacggggt
 300
 atgggtcccca ccaccgtcga gaattacgag aagctggggc ttgacgcttt ggtgactttg
 360
 ggtggcgggtg gcaccgcaa gaacgcgt
 388

<210> 58
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 58
 Arg Pro Thr Arg His Arg Ser Gly Val Val Met Ser Arg Lys Lys Lys
 1 5 10 15
 Val Gly Ile Leu Thr Ala Gly Gly Asp Cys Pro Gly Leu Asn Ala Ala
 20 25 30
 Ile Arg Gly Phe Gly Lys Ala Ala Ile Arg Gln His Asp Met Glu Leu
 35 40 45
 Ile Gly Ile Gln Asp Gly Phe Leu Gly Leu Ala Gly Asn Arg Thr Ile
 50 55 60
 Ser Leu Gly Pro Arg Ala Leu Ser Gly Ile Leu Thr Val Gly Gly Thr
 65 70 75 80
 Ile Leu Gly Thr Ser Arg Asp Lys Val Asn His Met Ile Ile Asp Gly
 85 90 95
 Glu Glu Arg Asp Met Val Pro Thr Thr Val Glu Asn Tyr Glu Lys Leu
 100 105 110
 Gly Leu Asp Ala Leu Val Thr Leu Gly Gly Gly Thr Ala Lys Asn
 115 120 125
 Ala

<210> 59
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 59
 ggtaccatcg gagctcgaca agaaatggtt gggatgaagtc gtggcttctg ctccacccag
 60
 tgcctcatg ggtagccca cctgaatata ttcattgctg tgcatttctc ctgatgttca
 120
 cgtgtgccct gtgtttttac gcattctgtga tcgtgcaccc acgcgtctca gagaggagcc
 180
 cgtttgggaa tccggagaat gtgcgctggc ggaagagcgt cacacactgg aagcaaacct
 240
 cagaccgcgt ggacaagacc aaggatgaaa tggaacacga ggccttggtg gaagggaacc
 300

tgccaaccga ggcaagccta gtggttctgg acacactgga gatcatcggtg cagacgggtga
360

tgctttcaga agcccgaggag agcgtcttgg gggcagtgtc gaaggttggtg ctgtaca
417

<210> 60

<211> 101

<212> PRT

<213> Homo sapiens

<400> 60

Met	Phe	Thr	Cys	Ala	Leu	Cys	Phe	Tyr	Ala	Ser	Val	Ile	Val	His	Pro
1			5					10					15		
Arg	Val	Ser	Glu	Arg	Ser	Pro	Phe	Gly	Asn	Pro	Glu	Asn	Val	Arg	Trp
		20					25				30				
Arg	Lys	Ser	Val	Thr	His	Trp	Lys	Gln	Thr	Ser	Asp	Arg	Val	Asp	Lys
		35				40					45				
Thr	Lys	Asp	Glu	Met	Glu	His	Glu	Ala	Leu	Val	Glu	Gly	Asn	Leu	Ala
	50				55				60						
Thr	Glu	Ala	Ser	Leu	Val	Val	Leu	Asp	Thr	Leu	Glu	Ile	Ile	Val	Gln
65				70				75						80	
Thr	Val	Met	Leu	Ser	Glu	Ala	Arg	Glu	Ser	Val	Leu	Gly	Ala	Val	Leu
			85					90						95	
Lys	Val	Val	Leu	Tyr											
			100												

<210> 61

<211> 304

<212> DNA

<213> Homo sapiens

<400> 61

agatcttcac agccttagac ttttttcacg ggtgccttac agttttggag gtccttatcc
60
gcacacatat ttgcaggctt ggagagagtg tgtgggggca tgtactttcg gtgggtcaag
120
tatgaagaag caggccttat aaacacatat tctgacctta acctgtactt cagaagagga
180
ccgctgactc accaaggagg cctgaaggac aaggcagcat ctctgtcttc acatgagtc
240
tcccctagac cggggcccatg gccaggcctg accacagagc tcccattgcc ttctctgcac
300
gcgt
304

<210> 62

<211> 92

<212> PRT

<213> Homo sapiens

<400> 62

Met	Gly	Ala	Leu	Gln	Phe	Trp	Arg	Ser	Leu	Ser	Ala	His	Ile	Phe	Ala
1			5						10				15		


```

Gly Leu Glu Arg Val Cys Gly Gly Met Tyr Phe Arg Trp Val Lys Tyr
20                      25                      30
Glu Glu Ala Gly Leu Ile Asn Thr Tyr Ser Asp Leu Asn Leu Tyr Phe
35                      40                      45
Arg Arg Gly Pro Leu Thr His Gln Gly Gly Leu Lys Asp Lys Ala Ala
50                      55                      60
Ser Leu Ser Ser His Glu Ser Ser Pro Arg Pro Gly Pro Trp Pro Gly
65                      70                      75                      80
Leu Thr Thr Glu Leu Pro Leu Pro Phe Leu His Ala
85                      90

```

```

<210> 63
<211> 577
<212> DNA
<213> Homo sapiens

```

```

<400> 63
cgcgctcaagg ggggtctacac cgggacgatt aacgcctcgg tgggagtatt catcaccgag
60
ctgacgggtgc tagctgggtg gctcaccccta gccgggcgta tcagtgtcgg ggaactcgtc
120
accgtggtgc ggctgggcca aaccctcggc cctccgctgc gagcactggg cgctgacacc
180
gcgacgatgt tggccacgcg ccacgcctcc ggggaccgat tctgtgagtt gcgtgatagc
240
ccggcagcct ggcagatcca ccccgacgac ggtgcccga ccacaccggg tgatggccccg
300
gtggagtgc acatcccggg cagggatttc cagcttgacg tcgccggcgg caccatgtg
360
ggtatcatgg cgcctcaatc ggtctgtgac gccttgccgg aggcgataga ccacgggtcc
420
gagaccgtct tgaatggggg tcccgcagc cgcctcaacc ctgcccacag gcgtcgtctg
480
gtgctgtgtg ctccccgctc ccccgaaactg ttcgacgata ctgcccgctg gaacatcgtg
540
cttgacagcc agacgactgt cgccaggctg aatgcat
577

```

```

<210> 64
<211> 192
<212> PRT
<213> Homo sapiens

```

```

<400> 64
Arg Val Lys Gly Val Tyr Thr Gly Thr Ile Asn Ala Ser Val Gly Val
1      5      10      15
Phe Ile Thr Ala Leu Thr Val Leu Ala Gly Trp Leu Thr Leu Ala Gly
20     25     30
Arg Ile Ser Val Gly Glu Leu Val Thr Val Val Gly Leu Ala Gln Thr
35     40     45
Leu Gly Pro Pro Leu Arg Ala Leu Gly Val Asp Thr Ala Thr Met Leu
50     55     60
Ala Thr Ala His Ala Ser Gly Asp Arg Phe Cys Glu Leu Arg Asp Ser
65     70     75     80

```

```

Pro Ala Ala Trp Gln Ile His Pro Asp Asp Gly Ala Arg Thr Thr Pro
      85          90          95
Gly Asp Gly Pro Val Glu Leu His Ile Pro Val Arg Asp Phe Gln Leu
      100        105        110
Asp Val Ala Gly Gly Thr His Val Gly Ile Met Ala Pro Gln Ser Val
      115        120        125
Cys Asp Ala Leu Ala Glu Ala Ile Asp His Gly Ser Glu Thr Val Leu
      130        135        140
Asn Gly Val Pro Ala Ser Arg Leu Asn Pro Ala Gln Arg Arg Arg Leu
      145        150        155        160
Val Leu Val Ala Pro Arg Ser Pro Glu Leu Phe Asp Asp Thr Ala Arg
      165        170        175
Ala Asn Ile Val Leu Asp Ser Gln Thr Thr Val Ala Arg Leu Asn Ala
      180        185        190

```

<210> 65

<211> 339

<212> DNA

<213> Homo sapiens

<400> 65

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gtcgaccgcy ccttgggcatc gctogaaggg gccagcctgg accaggtagc ggaagaagtc
60
aagaaggccg ctttcaagat caccgcgcc gggcaactag tgggcacatc ggcctccgag
120
cgccctggcg taccccttcg catcatcgac ctttgccttg cccctactgc cgaattggga
180
gattcggggg ccacatcct tgagcatatg ggattggacc aagtaggcac gcacggcaca
240
actgctgctt tggtctgtct taacgaogcc gtaaagaaag gcggcatgat ggcctgcccc
300
cgcgctggcg gtttgtctgg ctccttcac cggggtccc
339

```

<210> 66

<211> 113

<212> PRT

<213> Homo sapiens

<400> 66

```

Val Asp Arg Ala Leu Gly Ser Leu Glu Gly Ala Ser Leu Asp Gln Val
1      5      10      15
Ala Glu Glu Val Lys Lys Ala Ala Phe Lys Ile Thr Arg Ala Gly Gln
      20      25      30
Leu Val Gly Thr Met Ala Ser Glu Arg Leu Gly Val Pro Phe Gly Ile
      35      40      45
Ile Asp Leu Ser Leu Ala Pro Thr Ala Glu Leu Gly Asp Ser Gly Ala
      50      55      60
His Ile Leu Glu His Met Gly Leu Asp Gln Val Gly Thr His Gly Thr
65      70      75      80
Thr Ala Ala Leu Ala Leu Leu Asn Asp Ala Val Lys Lys Gly Gly Met
      85      90      95
Met Ala Cys Pro Arg Val Gly Gly Leu Ser Gly Ser Phe Ile Pro Gly
      100     105     110

```

Ser

<210> 67
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 67
 tgatcataaa ccacgcgtca ccgaggggat gtggcacacc tacctgcgcg tcgcagatgc
 60
 cgcacaggca cgggtcaggg gcgttcgcgg cgccagctgg cacaacttcg cgaccggtga
 120
 caaggggtcc ttgcacgcca acgagcttgc cgtaactcct gatactgaca ccgtcatcca
 180
 gggagtcggg cccgccctag ccttcctcga ttcagcgtgg ggacgccaga tccacgtgga
 240
 gacaacaggg tgtcccagtg ccgtgggtctg gaatccacgc tcctcgtcga cacatgccga
 300
 taacccgaca gcccaggcat ggccgcgattt cgtatgcgtc gagaccgggg cctgcaagga
 360
 caatgcggtc attgttgccc cacacagcga cctcaccatg tccacacgga tttagcgtcga
 420
 aacgttgtga tcgctgcatg gatatt
 446

<210> 68
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 68
 Met Trp His Thr Tyr Leu Arg Val Ala Asp Ala Ala Gln Ala Arg Val
 1 5 10 15
 Arg Gly Val Arg Gly Ala Ser Trp His Asn Phe Ala Thr Gly Asp Lys
 20 25 30
 Gly Ser Phe Asp Ala Asn Glu Leu Ala Val Thr Pro Asp Thr Asp Thr
 35 40 45
 Val Ile Gln Gly Val Gly Pro Ala Leu Ala Leu Leu Asp Ser Ala Trp
 50 55 60
 Gly Arg Gln Ile His Val Glu Thr Thr Gly Cys Pro Ser Ala Val Val
 65 70 75 80
 Trp Asn Pro Arg Ser Ser Ser Thr His Ala Asp Asn Pro Thr Ala Gln
 85 90 95
 Ala Trp Arg Asp Phe Val Cys Val Glu Thr Gly Ala Cys Lys Asp Asn
 100 105 110
 Ala Val Ile Val Ala Pro His Ser Asp Leu Thr Met Ser Thr Arg Ile
 115 120 125
 Ser Val Glu Thr Leu
 130

<210> 69
 <211> 552
 <212> DNA

<213> Homo sapiens

<400> 69

nnaagggttaa ggagaaaagc aaggaccttg caaagagagc ctctgtgccg gagaggctgg
 60
 ccctcaagga ggagccaaaa gaagacccca gtggagcagc tgtgcccgag atgccaaaa
 120
 agtcctccaa gattgccagc ttcacccca aaggggggaa gctcaacagt gccagaagg
 180
 agncctatgg cccttccct cagtgaata ccaaaaccag gaatgaaaag catgcccggg
 240
 aaatccccaa gtgcccagc gccttccaag gaaggggagc ggagccggag tgggaagctg
 300
 agctcaggac tccccagca gaagccccc ctggacggca gacactccag ttctctcttc
 360
 agcctggcgt cctcagaagg aaaaggccca ggagggacca cctgaacca cagcatcagc
 420
 agccagactg tcagtgggtc tgctgggacc acccagacca caggaagcaa tnnaccgtca
 480
 gtgttcagct acctcagccc cagcagcaat acaaccatcc caactgccc acggttgcc
 540
 ctttctctga ca
 552

<210> 70

<211> 184

<212> PRT

<213> Homo sapiens

<400> 70

Xaa Arg Val Arg Arg Lys Ala Arg Thr Leu Gln Arg Glu Pro Leu Cys
 1 5 10 15
 Arg Arg Gly Trp Pro Ser Arg Arg Ser Gln Lys Lys Thr Pro Val Glu
 20 25 30
 Gln Leu Cys Pro Arg Cys Gln Lys Ser Pro Pro Arg Leu Pro Ala Ser
 35 40 45
 Ser Pro Lys Gly Gly Ser Ser Thr Val Pro Arg Arg Ser Xaa Met Ala
 50 55 60
 Pro Ser Leu Ser Gly Ile Pro Lys Pro Gly Met Lys Ser Met Pro Gly
 65 70 75 80
 Lys Ser Pro Ser Ala Pro Ala Pro Ser Lys Glu Gly Glu Arg Ser Arg
 85 90 95
 Ser Gly Lys Leu Ser Ser Gly Leu Pro Gln Gln Lys Pro Gln Leu Asp
 100 105 110
 Gly Arg His Ser Ser Ser Ser Ser Leu Ala Ser Ser Glu Gly Lys
 115 120 125
 Gly Pro Gly Gly Thr Thr Leu Asn His Ser Ile Ser Ser Gln Thr Val
 130 135 140
 Ser Gly Ser Val Gly Thr Thr Gln Thr Thr Gly Ser Asn Xaa Pro Ser
 145 150 155 160
 Val Phe Ser Tyr Leu Ser Pro Ser Ser Asn Thr Thr Ile Pro Thr Leu
 165 170 175
 Pro Arg Leu His Leu Ser Cys Thr
 180

<210> 71
 <211> 316
 <212> DNA
 <213> Homo sapiens

<400> 71
 cgcgttgaaa tggcggttcga acttaaacgt ttacatattg actccgtgcc attaaacatt
 60
 ttgaatcctg ttaaaggagac tccatttgaa agcaacgaag ctttacgtcc tttaaatatac
 120
 ttacgtacct tcgcggtatt ccgtttcatc ttgccaaacg cattgatacg aactgcaggt
 180
 ggccgcgaag taaatctacg agacttacaa gcttatgctc taaaagggtgg cctaaacggt
 240
 atcatgggtg gtggctactt aactactggc ggtcgttcac ctcaagacga tctccaaatg
 300
 attcaagact tggagt
 316

<210> 72
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 72
 Arg Val Glu Met Ala Phe Glu Leu Lys Arg Leu His Ile Asp Ser Val
 1 5 10 15
 Pro Leu Asn Ile Leu Asn Pro Val Lys Gly Thr Pro Phe Glu Ser Asn
 20 25 30
 Glu Ala Leu Arg Pro Leu Asn Ile Leu Arg Thr Phe Ala Val Phe Arg
 35 40 45
 Phe Ile Leu Pro Asn Ala Leu Ile Arg Thr Ala Gly Gly Arg Glu Val
 50 55 60
 Asn Leu Arg Asp Leu Gln Ala Tyr Ala Leu Lys Gly Gly Leu Asn Gly
 65 70 75 80
 Ile Met Val Gly Gly Tyr Leu Thr Thr Gly Gly Arg Ser Pro Gln Asp
 85 90 95
 Asp Leu Gln Met Ile Gln Asp Leu Glu
 100 105

<210> 73
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 73
 nntaccggca agatcctggc cgaaggtgac gtcgaggttt ctgaggctat cgactttgct
 60
 gcttggtatg tcgaccgagc cgaggagctc gagggcgctg acggtgcccc gtttggtgccg
 120
 ccacgagtga ccgtcgtcac cccgcccgtg aacttcgccc tgtctattac cgccggatcc
 180

acccttgcgc ctctggccgc cggatcgta gtactactca agcccgtcc acaggcccgc
 240
 cactgtgctg ccgtcatctc tgaatgcctg tgggaggctg ggatccccgc ggacgttctg
 300
 cagctcgtcg atgttgagga aaatgaggct ggtaaacacc tggtagacca ccccagggtc
 360
 gatcgggtca tcctcacggg aggt
 384

<210> 74
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 74
 Xaa Thr Gly Lys Ile Leu Ala Glu Gly Asp Val Glu Val Ser Glu Ala
 1 5 10 15
 Ile Asp Phe Ala Ala Trp Tyr Val Asp Arg Ala Glu Leu Leu Glu Gly
 20 25 30
 Val Asp Gly Ala Gln Phe Val Pro Pro Arg Val Thr Val Val Thr Pro
 35 40 45
 Pro Trp Asn Phe Ala Leu Ser Ile Thr Ala Gly Ser Thr Leu Ala Ala
 50 55 60
 Leu Ala Ala Gly Ser Ser Val Leu Leu Lys Pro Ala Pro Gln Ala Arg
 65 70 75 80
 His Cys Ala Ala Val Ile Ser Glu Cys Leu Trp Glu Ala Gly Ile Pro
 85 90 95
 Arg Asp Val Leu Gln Leu Val Asp Val Glu Glu Asn Glu Ala Gly Lys
 100 105 110
 His Leu Val Ser His Pro Glu Val Asp Arg Val Ile Leu Thr Gly Gly
 115 120 125

<210> 75
 <211> 405
 <212> DNA
 <213> Homo sapiens

<400> 75
 gaattcgtct cggaatacac gctggaaaaa tcggccgaga tgccgggggt gcgctcanac
 60
 cgcattgagg cgctggccga gctctatgcc gatcccaaga ccagggtgggt gagcttctgg
 120
 accatggggt tcaaccagca caccgcggc gtctggtgca acaatctcgt ctacaacatc
 180
 cacctgctga cggaaaaaat ctgcagcccc ggcaacagcc cgttctcgtg gaccgggagc
 240
 ccattgcctt gcggcacggc gcgcgaggtc ggtaccttct cgcacgcctt gcccgcgac
 300
 atggtgggtca ccagcaaggc gcaccgcgac atcgccgaga agatctggca gctgccggaa
 360
 ggaccagtc cgcacaagcc cggctaccac gccgtgtctg agagc
 405

<210> 76

<211> 135
 <212> PRT
 <213> Homo sapiens

<400> 76
 Glu Phe Val Ser Glu Tyr Thr Leu Glu Asn Ser Ala Glu Met Ser Gly
 1 5 10 15
 Val Arg Ser Xaa Arg Ile Glu Ala Leu Ala Glu Leu Tyr Ala Asp Pro
 20 25 30
 Lys Thr Arg Val Val Ser Phe Trp Thr Met Gly Phe Asn Gln His Thr
 35 40 45
 Arg Gly Val Trp Cys Asn Asn Leu Val Tyr Asn Ile His Leu Leu Thr
 50 55 60
 Gly Lys Ile Ser Thr Pro Gly Asn Ser Pro Phe Ser Leu Thr Gly Gln
 65 70 75 80
 Pro Ser Ala Cys Gly Thr Ala Arg Glu Val Gly Thr Phe Ser His Arg
 85 90 95
 Leu Pro Ala Asp Met Val Val Thr Ser Lys Ala His Arg Asp Ile Ala
 100 105 110
 Glu Lys Ile Trp Gln Leu Pro Glu Gly Pro Val Pro Asp Lys Pro Gly
 115 120 125
 Tyr His Ala Val Leu Gln Ser
 130 135

<210> 77
 <211> 5816
 <212> DNA
 <213> Homo sapiens

<400> 77
 gagcggcgcc ctgctctggc cgttgetccc gctcctgctc ctgctgctgt cggcgcgagg
 60
 cggcgtgcgc gcccgcgagc ctcaggcccc gggttacttg attgcagctc cctctgtttt
 120
 tcgcgcgggc gtggaggaag tcatcagcgt gaccatcttt aactctccaa gggaagtcac
 180
 ggtccaggct cagctgggtg cccagggtga gccggtggtg cagagccagg gagccatcct
 240
 ggataaagg acaatcaaac tcaaggtgcc cacgggcctc cggggccaag cgcttctgaa
 300
 agtgtggggc cgcggctggc aggcggagga gggggccctc ttccacaacc agacctcggt
 360
 gaccgtggac ggcggggcg cttctgtatt catccagacg gacaagcctg tgtacagacc
 420
 ccagcaccga gtgctcataa gcatcttcac cgtctctcca aatctgaggc ctgtcaacga
 480
 gaagctggaa gcctacatcc tggacccccg aggcctctcg atgatagagt ggagacactt
 540
 aaagccgttc tgctgcggca tcaccaacat gagcttcccc ttgtccgacc agcctgtgtt
 600
 gggagaatgg ttcatttttg ttgaaatgca aggccacgag tacaacaagt cttttgaagt
 660
 tcagaagtat gtgttgccca agtttgagct tctgattgac ccgccccggt atatccaaga
 720

ctgtgacgcc tgtgagacag gcaactgtgcg ggccaggat acctttggga aacctgtggc
780
tggtgcctta atgatcaaca tgactgttaa tgggttaggg tactacagcc acgagggtggg
840
acgccctgtc ctcaagaaca ccaagatcct cggctcccg gacttcgaca tctgcgtgag
900
ggacatgac ccagcggacg tccctgagca ctcccgggc agggctcagca tctgggcat
960
ggtgaccagt gtggacggga gccagcaggt cgcgttcgat gactccaccc cgtgcagag
1020
gcagctgggt gacatccggt actccaagga cagcaggaag cagttcaagc cgggctggc
1080
ctacgtgggg aaggtggagc tatcctaccc cgatggcagc ccagctgagg ggtgacggt
1140
ccagattaag gcagagctga caccaaagga taacatctac accagtgaag ttgtgtccca
1200
gcgtggacta gtgggggttg aaatcccctc catcccccag tcagcccagc acgtgtgggt
1260
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<210> 78
 <211> 799
 <212> PRT
 <213> Homo sapiens

<400> 78
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 Thr Ala Ser Ile Ile Gly Asp Val Met Gly Pro Thr Leu Asn His Leu
 35 40 45
 Asn Asn Leu Leu Arg Leu Pro Phe Gly Cys Gly Glu Gln Asn Met Ile
 50 55 60
 His Phe Ala Pro Asn Val Phe Val Leu Lys Tyr Leu Gln Lys Thr Gln
 65 70 75 80
 Gln Leu Ser Pro Glu Val Glu Arg Glu Thr Thr Asp Tyr Leu Val Gln
 85 90 95
 Gly Tyr Gln Arg Gln Leu Thr Tyr Lys Arg Gln Asp Gly Ser Tyr Ser
 100 105 110
 Ala Phe Gly Glu Arg Asp Ala Ser Gly Ser Met Trp Leu Thr Ala Phe
 115 120 125
 Val Leu Lys Ser Phe Ala Gln Ala Arg Ser Phe Ile Phe Val Asp Pro
 130 135 140
 Arg Glu Leu Ala Ala Ala Lys Ser Trp Ile Ile Gln Gln Gln Ala
 145 150 155 160
 Asp Gly Ser Phe Leu Ala Val Gly Arg Val Leu Asn Lys Asp Ile Gln
 165 170 175
 Gly Gly Ile His Gly Ile Val Pro Leu Thr Ala Tyr Val Val Val Ala
 180 185 190
 Leu Leu Glu Thr Gly Thr Ala Ser Glu Glu Glu Arg Gly Ser Thr Asp
 195 200 205
 Lys Ala Arg His Phe Leu Glu Ser Ala Ala Pro Leu Ala Met Asp Pro
 210 215 220
 Tyr Ser Cys Ala Leu Thr Thr Tyr Ala Leu Thr Leu Leu Arg Ser Pro
 225 230 235 240
 Ala Ala Pro Glu Ala Leu Arg Lys Leu Arg Ser Leu Ala Ile Met Arg
 245 250 255
 Asp Gly Val Thr His Trp Ser Leu Ser Asn Ser Trp Asp Val Asp Lys
 260 265 270
 Gly Thr Phe Leu Ser Phe Ser Asp Arg Val Ser Gln Ser Val Val Ser
 275 280 285
 Ala Glu Val Glu Met Thr Ala Tyr Ala Leu Leu Thr Tyr Thr Leu Leu
 290 295 300
 Gly Asp Val Ala Ala Ala Leu Pro Val Val Lys Trp Leu Ser Gln Gln

```

305          310          315          320
Arg Asn Ala Leu Gly Gly Phe Ser Ser Thr Gln Asp Thr Cys Val Ala
          325          330          335
Leu Gln Ala Leu Ala Glu Tyr Ala Ile Leu Ser Tyr Ala Gly Gly Ile
          340          345          350
Asn Leu Thr Val Ser Leu Ala Ser Thr Asn Leu Asp Tyr Gln Glu Thr
          355          360          365
Phe Glu Leu His Arg Thr Asn Gln Lys Val Leu Gln Thr Ala Ala Ile
          370          375          380
Pro Ser Leu Pro Thr Gly Leu Phe Val Ser Ala Lys Gly Asp Gly Cys
          385          390          395
Cys Leu Met Gln Ile Asp Val Thr Tyr Asn Val Pro Asp Pro Val Ala
          400          405          410          415
Lys Pro Ala Phe Gln Leu Leu Val Ser Leu Gln Glu Pro Glu Ala Gln
          420          425          430
Gly Arg Pro Pro Pro Met Pro Ala Ser Ala Ala Glu Gly Ser Arg Gly
          435          440          445
Asp Trp Pro Pro Ala Asp Asp Asp Asp Pro Ala Ala Asp Gln His His
          450          455          460
Gln Glu Tyr Lys Val Met Leu Glu Val Cys Thr Arg Trp Leu His Ala
          465          470          475          480
Gly Ser Ser Asn Met Ala Val Leu Glu Val Pro Leu Leu Ser Gly Phe
          485          490          495
Arg Ala Asp Ile Glu Ser Leu Glu Gln Leu Leu Leu Asp Lys His Met
          500          505          510
Gly Met Lys Arg Tyr Glu Val Ala Gly Arg Arg Val Leu Phe Tyr Phe
          515          520          525
Asp Glu Ile Pro Ser Arg Cys Leu Thr Cys Val Arg Phe Arg Ala Leu
          530          535          540
Arg Glu Cys Val Val Gly Arg Thr Ser Ala Leu Pro Val Ser Val Tyr
          545          550          555          560
Asp Tyr Tyr Glu Pro Ala Phe Glu Ala Thr Arg Phe Tyr Asn Val Ser
          565          570          575
Thr His Ser Pro Leu Ala Arg Glu Leu Cys Ala Gly Pro Ala Cys Asn
          580          585          590
Glu Val Glu Arg Ala Pro Ala Arg Gly Pro Gly Trp Phe Pro Gly Glu
          595          600          605
Ser Gly Pro Ala Val Ala Pro Glu Glu Gly Ala Ala Ile Ala Arg Cys
          610          615          620
Gly Cys Asp His Asp Cys Gly Ala Gln Gly Asn Pro Val Cys Gly Ser
          625          630          635          640
Asp Gly Val Val Tyr Ala Ser Ala Cys Arg Leu Arg Glu Ala Ala Cys
          645          650          655
Arg Gln Ala Ala Pro Leu Glu Pro Ala Pro Pro Ser Cys Cys Ala Leu
          660          665          670
Glu Gln Arg Leu Pro Ala Ser Ser Ser Ser Thr Tyr Gly Asp Asp Leu
          675          680          685
Ala Ser Val Ala Pro Gly Pro Leu Gln Gln Asp Val Lys Leu Asn Gly
          690          695          700
Ala Gly Leu Glu Val Glu Asp Ser Asp Pro Glu Pro Glu Gly Glu Ala
          705          710          715          720
Glu Asp Arg Val Thr Ala Gly Pro Arg Pro Pro Val Ser Ser Gly Asn
          725          730          735
Leu Glu Ser Ser Thr Gln Ser Ala Ser Pro Phe His Arg Trp Gly Gln

```

```

              740              745              750
Thr Pro Ala Pro Gln Arg His Ser Gly Arg Val Val Gly Ala His Arg
              755              760              765
Pro Gly Leu Leu Ser Pro Val Phe Val Tyr Ser Pro Ala Phe Gln Ser
              770              775              780
Gly Gly Glu Glu Gly Leu Trp Met Ser Asn Thr Cys Thr Leu Arg
785              790              795

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<210> 79
 <211> 346
 <212> DNA
 <213> Homo sapiens

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<400> 79
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ccgatgcaac ggcatacata ctcaaggcca tgaagtcgtt ggtgcggctc tggaagtact
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240
ccagatactc ggctttttct tcggcggact tgcccggcag gtaatccttg ggcgcgacgt
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gcatggcgat caatgcccggt ctgtccgctt ccggnccnnn cnnccnn
346

```

<210> 80
 <211> 101
 <212> PRT
 <213> Homo sapiens

```

<400> 80
Met His Val Ala Pro Lys Asp Tyr Leu Pro Gly Lys Ser Ala Glu Glu
1          5          10          15
Lys Ala Glu Tyr Leu Ala Ala Thr Ser Tyr Arg Asp Phe Leu Leu Lys
20         25         30
Asp Val Gly Leu Ser Glu Gly Ala Val Lys Tyr Phe Gln Ser Arg Thr
35         40         45
Asn Asp Phe Met Ala Leu Ser Ile Asp Ala Val Ala Ser Ala Asp Ala
50         55         60
Tyr Ser Val Gly Phe Pro Gly Phe Gly Gly Met Asn Leu Ala Pro Ile
65         70         75         80
Ser Glu Glu Ala Ala Glu Met Glu Glu Pro Tyr Ile Tyr His Phe
85         90         95
Pro Asp Gly Asn Ala
100

```

<210> 81
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 81

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 tgactttaaatt ttgataaccag aaatgtcagt ttggcctttgc ttgaacagcc gcgtgcgggg
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 cctctatgag tggaaatccag tctcatggcc ccccccatgg ctctctgttac cctggaggag
 180
 gctactccat gaggtgggt cgggtggcac tgcctcgggg ctgcatgtac atgtgtgtgc
 240
 atgnntgtgt gcatgtgcgt gtgcacgtgt nngtgtgtgc cgtgtgcat gtgcccgtgt
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 gcgtgtctgt gctgtgtgtg tgcgtgcatg tgtgcgtgtc tgtgcgtgnc tgtgtgtgtg
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 420
 tgcacgcgt
 429

<210> 82

<211> 79

<212> PRT

<213> Homo sapiens

<400> 82

Gly	Trp	Leu	Arg	Trp	His	Cys	Leu	Gly	Ala	Ala	Cys	Thr	Cys	Val	Cys
1				5					10					15	
Met	Xaa	Val	Cys	Met	Cys	Val	Cys	Thr	Cys	Xaa	Cys	Val	Pro	Val	Cys
				20					25					30	
Met	Cys	Pro	Cys	Ala	Cys	Leu	Cys	Cys	Val	Cys	Ala	Cys	Met	Cys	Ala
				35					40					45	
Cys	Leu	Cys	Val	Xaa	Val	Cys	Val	Arg	Ala	Cys	Val	Cys	Thr	Cys	Val
				50					55					60	
His	Val	His	Val	Cys	Ala	Pro	Val	Cys	Met	Ser	Val	Cys	Thr	Arg	
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<210> 83

<211> 411

<212> DNA

<213> Homo sapiens

<400> 83

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 300
 cgccgacgac atcttttgca cctttgtaag cccccgcttt atctgcatgc gcatcatgac
 360
 gtcgctcttt tctttgagca tgacggaaac gatggaattg acgacggcga c
 411

<210> 84
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 84
 Met Leu Lys Glu Lys Ser Asp Arg Met Met Arg Met Gln Ile Lys Arg
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 Gly Leu Thr Lys Val Gln Lys Ile Val Ala Ala Ser Glu Phe Leu Arg
 20 25 30
 Asn Asp Leu Ile Gly Leu Gly Ile Asp Lys Ala Lys Ile Glu Ile Ile
 35 40 45
 His Asn Gly Ile Asp His Arg Pro Phe Phe Pro Gln Leu Gln Ile Asp
 50 55 60
 Ala Glu Thr Val Thr Ile Lys Pro Phe Ala Ile Lys Arg Pro Tyr Phe
 65 70 75 80
 Ile Tyr Gly Ser Arg Leu Ser Gly Pro Glu Lys Lys His Ile Glu Leu
 85 90 95
 Ile Lys Ala Phe Ala Leu Phe Lys Glu Arg Thr Lys Ser Pro His Pro
 100 105 110
 Leu Val Ile Ala Gly Ala Glu Gly Pro Ser Ser Glu Glu Val His
 115 120 125

<210> 85
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 85
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 atcctcgacg cggtgaaact gctgagttcg ctcgggttca aggtgatcgc caccctggggc
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 acccagcggt tctctggtgga gaacggagta ccggcgga aa agatcaacaa ggtgctggaa
 180
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 240
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 300
 aaagtgccat attacaccac tctttcaggt gca
 333

<210> 86
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 86
 Xaa Arg Val Pro Arg Lys Gly Thr Met Phe Val Ser Val Arg Glu Thr
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 Asp Lys Ala Arg Ile Leu Asp Ala Val Lys Leu Leu Ser Ser Leu Gly
 20 25 30
 Phe Lys Val Ile Ala Thr Ser Gly Thr Gln Arg Phe Leu Val Glu Asn

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      35              40              45
Gly Val Pro Ala Glu Lys Ile Asn Lys Val Leu Glu Gly Arg Pro His
      50              55              60
Ile Val Asp Ala Ile Thr Asn Gly Glu Val Gln Leu Val Phe Asn Thr
      65              70              75              80
Thr Glu Gly Pro Gln Ala Leu Ala Asp Ser Arg Ser Leu Arg Arg Ala
      85              90              95
Ala Leu Leu His Lys Val Pro Tyr Tyr Thr Thr Leu Ser Gly Ala
      100             105             110

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<210> 87

<211> 355

<212> DNA

<213> Homo sapiens

<400> 87

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      120
attgtgcttc gcccggtgac gagtgaggac gccatgactg cggactgggc acgtatccca
      180
tatgacgtac tggaaaagat ctcgactcgc attacgaatg cgtgtccgca aatcaaccgg
      240
gtgggtactgc atatcacatc taaaccgccg gccaccatcg agtgggaatg agccccgtct
      300
caccgtgaac atgacatggc ccgcaccctt cttggggcgg gccatgccgt gtttag
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<210> 88

<211> 96

<212> PRT

<213> Homo sapiens

<400> 88

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Thr Arg Glu Glu Met Gly Ala Ala Gly Leu Asp Arg Lys Val Trp Gln
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Cys Pro Val Val Leu Leu Ser Asp Val His Ser Val Gly Val Gln Gly
      20              25              30
Asp Gly Arg Thr Tyr Gly Ser Pro Ile Val Leu Arg Pro Val Thr Ser
      35              40              45
Glu Asp Ala Met Thr Ala Asp Trp Ala Arg Ile Pro Tyr Asp Val Leu
      50              55              60
Glu Lys Ile Ser Thr Arg Ile Thr Asn Ala Cys Pro Gln Ile Asn Arg
      65              70              75              80
Val Val Leu Asp Ile Thr Ser Lys Pro Ala Thr Ile Glu Trp Glu
      85              90              95

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<210> 89

<211> 351

<212> DNA

<213> Homo sapiens

<400> 89

ATTORNEY DOCKET NO.: 15966-543

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 120
 ggtgattgga taaggccaga ggggtgggag ggggttctgcc cctgctgaag cctggtgggg
 180
 cccaggtctg tgatctggga ccggaacaac acatctgctc tgggcctgct ggatgtggcg
 240
 caagccctgg aacagaacca cagcctcaag tccatgcccg tgccactgaa tgacgtaacc
 300
 caggctcatc gcagccggcc agaactcaca actcgagcgg tccatcagat c
 351

<210> 90
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 90
 Ser Leu Val Gly Pro Arg Ser Val Ile Trp Asp Arg Asn Asn Thr Ser
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 Ala Leu Gly Leu Leu Asp Val Ala Gln Ala Leu Glu Gln Asn His Ser
 20 25 30
 Leu Lys Ser Met Pro Leu Pro Leu Asn Asp Val Thr Gln Ala His Arg
 35 40 45
 Ser Arg Pro Glu Leu Thr Thr Arg Ala Val His Gln Ile
 50 55 60

<210> 91
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 91
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 300
 acgtgacctt gcccttcccc atgaggt
 327

<210> 92
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 92
 Met Gly Lys Gly Lys Val Thr Phe Pro Asn Gly Phe Thr Val Glu Gly

ATTORNEY DOCKET NO.: 15966-543

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Ser Phe Gly Ser Gly Ala Gly Arg Gly Leu His Thr Gln Gly Val Leu
      20
Asp Thr Ala Ala Leu Pro Pro Asp Pro Ser Ser Thr Cys Lys Arg Gln
      35
Leu Gly Val Gly Ala Phe Pro Gly Lys Ala Ala Gly Arg Glu Ser Thr
      50
Ala Pro Ser Gly Thr Leu Cys Val Leu Ala Ala Pro Gly Thr Cys Arg
      65
Arg Pro Cys Trp Ala Ser Thr Cys Arg Ala Pro Gly Ser Cys Val Gly
      85
Leu Arg Ile Thr Cys Pro Ala Arg Gly Pro Thr
      100

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<210> 93
 <211> 394
 <212> DNA
 <213> Homo sapiens

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<400> 93
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240
gctctatttc gaggetatca ggttgctgt caacaaccgt tatcacggcc agtgggtgac
300
aatggaagtt gtcgttaccg gcaagcatac caggggactt ctcgatcggtg cagtcaactt
360
ggcggaagaa agtgccacag gattcactca cgta
394

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<210> 94
 <211> 109
 <212> PRT
 <213> Homo sapiens

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<400> 94
Met Leu Ala Gly Asn Asp Asn Phe His Cys His Pro Leu Ala Val Ile
      1             5             10             15
Thr Val Val Asp Thr Gln Pro Asp Ser Leu Glu Ile Glu Arg Phe Arg
      20
Phe Arg Thr Leu Gly His Asp Gln Val Ala Pro Gly Ile Tyr Arg Tyr
      35
Lys Arg Arg Gly Ala Ser Leu Ala Arg Pro Pro Leu Leu His Pro Arg
      50
Gly Arg Arg Ala Arg Arg Leu Pro Leu Ala Val Leu Trp Arg Pro Ile
      65
Ala His Val Arg Arg Pro Ile Arg Ala Cys Cys Ser Gly Met Gly Pro
      85
His Arg Asn Ala Pro Arg Gly Thr Ala Cys Arg Thr Arg
      95

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100

105

<210> 95
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 95
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 tgcttggatc ctaaaatgga ctggctctgg gtgtgtaacc cgggtgaagt tatagcctcc
 120
 ccaaatgtag gtgacagaag gaagacaaga ggtgtaagct ggagagggaa gggaagaaat
 180
 cagtggcttt ggccagcctc tgtgccaccc agtacgacag aggagtggga actggccctc
 240
 tggggctctg cttggccata ggcactgcac attgtgccac ctgctcatca cctcctctag
 300
 tctcacactg agcatcggag tacctgttgt gcagacagga aaactgagga gctctgagag
 360
 gctgagcatg gagctcacc catgccatag ggtgtgggaa gagggcacag gaggcctcat
 420
 ccattggggga aagggttagg gatggacatg ggtggggaga gggcatagac atcccttctc
 480
 aatctctgtt cccaccacat tcataggag atgagttagg agatgacagc t
 531

<210> 96
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 96
 Met Arg Pro Pro Val Pro Ser Ser His Thr Leu Trp His Gly Val Ser
 1 5 10 15
 Ser Met Leu Ser Leu Ser Glu Leu Leu Ser Phe Pro Val Cys Thr Thr
 20 25 30
 Gly Thr Pro Met Leu Ser Val Arg Leu Glu Glu Val Met Ser Arg Trp
 35 40 45
 His Asn Val Gln Cys Leu Trp Pro Ser Arg Ala Pro Glu Gly Gln Phe
 50 55 60
 Pro Leu Leu Cys Arg Thr Gly Trp His Arg Gly Trp Pro Lys Pro Leu
 65 70 75 80
 Ile Ser Ser Leu Pro Ser Pro Ala Tyr Thr Ser Cys Leu Pro Ser Val
 85 90 95
 Thr Ser Ile Trp Gly Gly Tyr Asn Phe Thr Gly Val Thr His Pro Arg
 100 105 110
 Pro Val His Phe Arg Ile Gln Ala Lys Phe Pro Glu
 115 120

<210> 97
 <211> 405
 <212> DNA
 <213> Homo sapiens

<400> 97
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 60
 tcgcggtgcc ttgcgcgcgg gctggttaggt ggagaagccg cgcgagtacg ccgcgtagag
 120
 cgacatcgtg tctgagacgt cgaagctcag gccagcttt ggcgccagg cgcgctcggt
 180
 cggtccgccc tcttgcggca attgattcag cgcaatcccg gccatcacat gccagcgctt
 240
 gtccagggtc atgaaatcct gggcataggc gcgcgaggag cgcagcggcg aattggacag
 300
 gcgctcgata ttgggcgtga tgtccgaaga cgggaacggg acccgggggg agaagacgtt
 360
 gcccgggaaa agatcccccg acgccatcgt ggtgtcgacc gagat
 405

<210> 98
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 98
 Met Ala Ser Gly Asp Leu Phe Pro Gly Asn Val Phe Ser Pro Arg Val
 1 5 10 15
 Pro Phe Pro Ser Ser Asp Ile Thr Pro Asn Ile Glu Arg Leu Ser Asn
 20 25 30
 Ser Pro Leu Arg Ser Ser Arg Ala Tyr Ala Gln Asp Phe Met Thr Leu
 35 40 45
 Asp Lys Arg Trp His Val Met Ala Gly Ile Ala Leu Asn Gln Leu Pro
 50 55 60
 Gln Glu Gly Gly Pro Thr Glu Arg Ala Trp Thr Pro Lys Leu Gly Leu
 65 70 75 80
 Ser Phe Asp Val Ser Ser Asp Thr Met Ser Leu Tyr Gly Ala Tyr Ser Arg
 85 90 95
 Gly Phe Ser Thr Tyr Gln Pro Ala Arg Lys Ala Pro Arg Ala Tyr Gly
 100 105 110
 Pro Ser Ala Ala Arg Pro Ser Lys Arg Glu
 115 120

<210> 99
 <211> 545
 <212> DNA
 <213> Homo sapiens

<400> 99
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 60
 tgccccgacg acccagcaaa cgtccccggc tggttcctcat tgaccacgcc gaccggatcg
 120
 tcgaccccat cactcgggat ttgctggaat ccttggttcg cgaagccggc gaggctcgcg
 180
 tgatcttggg tgcccagcgt cgcggctcgca tcgattggct ctccccacag atcatccaca
 240

accctggccga acaccattttt gagtcgtcct ctggagggtac tcgatgatga ctgaacgttc
 300
 ccattccacg atcagggttaa ggtggccggc ggtgggtggt ctcgtctctg ttccgctgct
 360
 ggtgggtgcc ggattgggtcc gggacgacct ggcataccac cgaccggttg ggccgggtga
 420
 aagcggccgt cgtcaacgag gacaaggccg tcaagggtgcg tggacaactg gttccgatgg
 480
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 540
 tcgac
 545

<210> 100
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 100
 Met Gly Thr Phe Ser His His Arg Val Pro Pro Glu Asp Asp Ser Lys
 1 5 10 15
 Trp Cys Ser Ala Arg Leu Trp Met Ile Cys Gly Glu Ser Gln Ser Met
 20 25 30
 Arg Pro Arg Arg Trp Ala Pro Lys Ile Thr Ala Ala Ser Pro Ala Ser
 35 40 45
 Arg Thr Arg Asp Ser Ser Lys Ser Arg Val Met Gly Ser Thr Ile Arg
 50 55 60
 Ser Ala Trp Ser Met Arg Asn Ser Arg Gly Arg Leu Leu Gly Arg Arg
 65 70 75 80
 Gly Arg Trp Val Ser Thr Val Ile Ala Glu Arg Ser Ser Ser Thr Thr
 85 90 95
 Ser Gly Ala Asp Ala
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<210> 101
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 101
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 tcatgacaga tccggacttc gatccgatcc ccattggtgaa caaggagctt gacgccttcg
 120
 aagctgccgg ggggtactat ctcatcctcg ccacggattc cggacgcaag ggatacacga
 180
 ccgcccgtcc tcacgaggcc ggcggaaaac gctattacca acctggacca gatccgcgaa
 240
 gtctgcgcca gccgcaactg caccgcctgt ctacaccccc attggggaac gatggtccag
 300
 aaccgtgacg aagtgatccg cgtgctcgag aactcctcga tcgggctgtg cctggacact
 360
 ggtcatctcg cctgtggtgg taccgatgtc gttgagctgg tgcgtaagta cgccaaccg
 420

gtcgacattg tccacgcaa agatgtccat aaggagatgg cgcacaagct ttgctctggc
 480
 gagatcacct gggtccgaagg cattcgcgcc gggatgttcg caccatcgg cgacgggtgat
 540
 atcgactttg cagccatcgt gaggctcctt gatgaagccg gggtcgatgg ttattacgtc
 600
 ctagagcagg acatcatga
 619

<210> 102
 <211> 173
 <212> PRT
 <213> Homo sapiens

<400> 102
 Thr Arg Ser Leu Thr Pro Ser Lys Leu Pro Gly Val Thr Ile Ser Ser
 1 5 10 15
 Ser Pro Arg Ile Pro Asp Ala Arg Asp Thr Arg Pro Pro Val Leu Thr
 20 25 30
 Arg Pro Ala Glu Asn Ala Ile Thr Asn Leu Asp Gln Ile Arg Glu Val
 35 40 45
 Cys Ala Ser Arg Asn Val Thr Ala Cys Leu His Pro His Trp Gly Thr
 50 55 60
 Met Val Gln Asn Arg Asp Glu Val Ile Arg Val Leu Glu Asn Ser Ser
 65 70 75 80
 Ile Gly Leu Cys Leu Asp Thr Gly His Leu Ala Cys Gly Gly Thr Asp
 85 90 95
 Val Val Glu Leu Val Arg Lys Tyr Ala Asn Arg Val Asp Ile Val His
 100 105 110
 Ala Lys Asp Val His Lys Glu Met Ala Asp Lys Leu Leu Pro Gly Glu
 115 120 125
 Ile Thr Trp Ser Glu Gly Ile Arg Ala Gly Met Phe Ala Pro Ile Gly
 130 135 140
 Asp Gly Asp Ile Asp Phe Ala Ala Ile Val Arg Leu Leu Asp Glu Ala
 145 150 155 160
 Gly Phe Asp Gly Tyr Tyr Val Leu Glu Gln Asp Ile Met
 165 170

<210> 103
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 103
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 gccattgggg ggagaccctt gccgtgggga aagacccttg ccatggggga gaccctgccc
 120
 actgggggga gaccctgccc gctgggggga gaccgagacc attgggggga gaccctgccc
 180
 atgggggaaag acccctgcca ttgggggaga ntacctgcca ttgggggaga tccctgccgt
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 tggggggaga tccctgctgt tgggggga ntcctcctg taggggaaga cccctgcagg
 300

agtgggtggg gcgaagaccc c
321

<210> 104
<211> 107
<212> PRT
<213> Homo sapiens

<400> 104
Xaa His Gly Gly Arg Gln Gln Pro Cys Gly Gly Asp Pro Ser His Trp
1 5 10 15
Gly Glu Thr Pro Ala Ile Gly Gly Arg Pro Leu Pro Trp Gly Lys Thr
20 25 30
Pro Ala Met Gly Gln Thr Pro Ala Thr Gly Gly Arg Pro Leu Pro Leu
35 40 45
Gly Gly Asp Pro Ser His Trp Gly Glu Thr Pro Ala Met Gly Lys Asp
50 55 60
Pro Cys His Trp Gly Arg Xaa Pro Ala Ile Gly Gly Asp Pro Cys Arg
65 70 75 80
Trp Gly Glu Ile Pro Ala Val Gly Gly Arg Xaa Pro Pro Val Gly Glu
85 90 95
Asp Pro Cys Arg Ser Gly Trp Gly Glu Asp Pro
100 105

<210> 105
<211> 344
<212> DNA
<213> Homo sapiens

<400> 105
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ccgggtcaac gagggtttgg cgcacggtcc actccgtggc gcccggggtg atgtgcaaca
120
gggcggggccc gcgcgcggcc gggcctgatt ccagcctctc gtgtctgtcc cagtacccat
180
ccagcgcacg gccccagcgg tcggcatccc agccgtggtc gccgtcgagc gccccagggg
240
cttcaatgtc gtcacggcg gccagttcca cccggcgga catctcgttg cggaccatga
300
ccggaaggc gcgggaattc tcggtcagtt tcggcgggtgc cggc
344

<210> 106
<211> 62
<212> PRT
<213> Homo sapiens

<400> 106
Cys Ala Thr Gly Arg Ala Arg Ala Arg Pro Gly Leu Ile Pro Ala Ser
1 5 10 15
Arg Ala Arg Pro Ser Thr His Pro Ala His Arg Pro Ser Gly Arg His
20 25 30
Pro Ser Arg Gly Arg Arg Arg Ala Pro Pro Gly Pro Gln Cys Arg His

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          35              40              45
Arg Arg Pro Val Pro Pro Gly Gly Thr Ser Arg Cys Gly Pro
  50              55              60

<210> 107
<211> 549
<212> DNA
<213> Homo sapiens

<400> 107
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gccgcttaat aaccgaccaa catgaaactc aagggtgccc ctttcctagc ggggaccttg
120
cacagacccc aaaataagggt gttttgtctc gccctcctca gttcacgtgg gcaccttgga
180
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240
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300
gagctctgct cacctggaaa agcatttttg tgtagcttaa atgtgaaggc ctcaggcagt
360
ggcctgttgt cctcctccac atgcgcccac cttcaetctt tcatgtgact ggcctgtttt
420
tgaaggcaag gccctgttca cccttggtta ggccaggatg gttctgcacc gaaatggcc
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540
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549

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<210> 108
<211> 108
<212> PRT
<213> Homo sapiens

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<400> 108
Met Lys Leu Lys Gly Cys Pro Phe Leu Ala Gly Thr Leu His Arg Pro
  1      5      10      15
Glu Asn Lys Gly Phe Cys Ser Ala Leu Ser Ser Arg Gly His Leu
      20      25      30
Gly Thr Leu Lys Lys Ala Phe Ser Glu Leu Thr Val Leu Arg Thr Tyr
      35      40      45
Ser Pro His Cys Phe Arg Leu Leu Arg Pro Val Leu Val Thr Asp Arg
      50      55      60
Ser Arg Gly His Lys Gln Ala Ala Arg Glu Leu Cys Ser Pro Gly Lys
      65      70      75      80
Ala Phe Leu Cys Ser Leu Asn Val Lys Ala Ser Gly Ser Gly Leu Leu
      85      90      95
Ser Ser Ser Thr Cys Ala His Leu His Ser Phe Met
      100      105

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<210> 109
<211> 748

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<212> DNA

<213> Homo sapiens

<400> 109

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 120
 gatattgggg taagttacca atttacttta cagcccttaa gtaaataatc tgctttcttc
 180
 agcatcatag acttttgaag aggattaatt aagcgcttaa aaaacctgta gactctatta
 240
 cagtcagtga aaggaataat tctctttaca aagtaaatgc agttgtttta ttttagacaa
 300
 gagtgttcta aacttcgtga agagttaagg cttcaacatg aagaggataa gaagtcagca
 360
 atgtctcaac ttttgcagtt gaaagatcga gagaaaaatg cagcaagaga ttcatggcag
 420
 aagaaaagtag aagatctctt aaaccagatt tccttgctga aacagaatct ggagatacag
 480
 ctttcccagt ctcagacttc tttgcaacaa ctgcaagccc agtttacgca agaacgacag
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 600
 aaagaagcac atgtccttgc atttcaaact atggaagagg aaaagaaaaa ggagcaaaga
 660
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 720
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 748

<210> 110

<211> 157

<212> PRT

<213> Homo sapiens

<400> 110

Met Gln Leu Phe Tyr Phe Arg Gln Glu Cys Ser Lys Leu Arg Glu Glu
 1 5 10 15
 Leu Arg Leu Gln His Glu Glu Asp Lys Lys Ser Ala Met Ser Gln Leu
 20 25 30
 Leu Gln Leu Lys Asp Arg Glu Lys Asn Ala Ala Arg Asp Ser Trp Gln
 35 40 45
 Lys Lys Val Glu Asp Leu Leu Asn Gln Ile Ser Leu Leu Lys Gln Asn
 50 55 60
 Leu Glu Ile Gln Leu Ser Gln Ser Gln Thr Ser Leu Gln Gln Leu Gln
 65 70 75 80
 Ala Gln Phe Thr Gln Glu Arg Gln Arg Leu Thr Gln Glu Leu Glu Glu
 85 90 95
 Leu Glu Glu Gln His Gln Gln Arg His Lys Ser Leu Lys Glu Ala His
 100 105 110
 Val Leu Ala Phe Gln Thr Met Glu Glu Glu Lys Glu Lys Gln Gln Arg
 115 120 125
 Ala Leu Glu Asn His Leu Gln Gln Lys His Ser Ala Glu Leu Gln Ser

130	135	140
Leu Lys Asp Ala His Arg Glu Ser Met Glu Gly Phe Arg		
145	150	155

<210> 111
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 111
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 120
 tcgggttatn nacgccacca gcatncgact ttgggtgaga tcatcgacc gttcggacat
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 ctgggtcatga tcgacggaac cgactcatte gatctcatgg ctttcaagtc aaagtcttta
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 420
 gagtcggc
 429

<210> 112
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 112
 Ala Arg Pro Glu Ser Ala Gln Trp Cys Gln Asp Met Gly Ala Thr Gly
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 Ile Ile Asn His Arg Glu Pro Leu Ala Pro Gln Val Asn Asp Phe Gly
 20 25 30
 Ile Thr Gly Phe Asp Gly Ile Leu Ser Ala Tyr Xaa Arg His Gln His
 35 40 45
 Xaa Thr Leu Ala Glu Ile Ile Ala Pro Phe Gly His Leu Val Met Ile
 50 55 60
 Asp Gly Thr Asp Ser Phe Asp Leu Met Ala Phe Lys Ser Lys Ser Leu
 65 70 75 80
 Thr Val Thr Ser Glu Ser Met Phe Ser Arg Pro Gln Phe Ala Thr Pro
 85 90 95
 Asp Val Ala Glu Gln Gly Arg Ala Leu Ala Ser Ile Ala Asp Leu Val
 100 105 110
 Glu Lys Gly Gln Ile Arg Pro Thr Met Thr Arg His Ile Glu Gly Leu
 115 120 125
 Thr Thr Gln His Val Arg Glu Ala Thr Ala Ala Val Glu Ser Gly
 130 135 140

<210> 113
 <211> 382

<212> DNA

<213> Homo sapiens

<400> 113

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 120
 gtccacagcc ccaccttctg ccagctggcg tgcggccagg atgggacgct gaagggcttc
 180
 gcggtgctgg agtatgagac ggctgagatg gcggaggagg cacagcagca ggcggacggc
 240
 ctgtcccttg ggggcagcca cctgcgagtc tccttctgcg cccctgggac ccccgggcgc
 300
 agtatgctgg ccgctctcat cgttgcccag gccacggccc tcaatcgggg gcaggggagtc
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 382

<210> 114

<211> 125

<212> PRT

<213> Homo sapiens

<400> 114

Met	Leu	Gly	Ser	Gly	Arg	Thr	Pro	Cys	Pro	Arg	Leu	Arg	Ala	Val	Ala
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Trp	Ala	Thr	Met	Arg	Ala	Ala	Ser	Ile	Leu	Arg	Pro	Gly	Val	Pro	Gly
			20					25				30			
Ala	Gln	Lys	Glu	Thr	Arg	Arg	Trp	Leu	Pro	Pro	Arg	Asp	Arg	Pro	Ser
		35					40					45			
Ala	Cys	Cys	Cys	Ala	Ser	Ser	Ala	Ile	Ser	Ala	Val	Ser	Tyr	Ser	Ser
		50				55				60					
Thr	Ala	Lys	Pro	Phe	Ser	Cys	Pro	Ser	Trp	Pro	His	Ala	Ser	Trp	Gln
65				70					75				80		
Lys	Val	Gly	Leu	Trp	Thr	Ala	Asp	Ser	Ala	Arg	His	Arg	Ala	Ser	Thr
			85					90					95		
Ser	Leu	Lys	Pro	Gly	Gly	Arg	Arg	Ser	Thr	Gln	Arg	Gln	Gln	Glu	Trp
		100					105					110			
Arg	Arg	Ala	Gly	Leu	Ser	Ser	Pro	Ala	Ser	Val	Gln	Cys			
		115					120					125			

<210> 115

<211> 4798

<212> DNA

<213> Homo sapiens

<400> 115

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 120
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 180

atggggtcca ccctctgagt gtgtcatgaa ctcttccact tccttgccctt gggttcgtatt
240
gggtccctctg ccgaggtca gagatttgga cgagcccttc tcctccatct tcacagtcctc
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420
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480
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540
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1980
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2760
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3300
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3420

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 3480
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 4200
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 4680
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 4798

<210> 116

<211> 1062

<212> PRT

<213> Homo sapiens

<400> 116

Met Met Gly Thr Ser Gln Gly His Val Ala Arg Lys Ser Arg Asn Trp

1	5	10	15
Gly Leu Asn Pro	Ser Arg Leu Ser	Ile Pro Leu Ser	Ser Thr Pro
20	25	30	
Cys His Leu Ser	Pro Ser Ser Leu Ser	Phe Ser Val Ala	Glu Arg
35	40	45	
Lys Pro Pro Leu	Phe Asn Met Asn	Ala Met Ser Ala	Leu Tyr His Ile
50	55	60	
Ala Gln Asn Glu	Ser Pro Val Leu	Gln Ser Gly His	Trp Ser Glu Tyr
65	70	75	80
Phe Arg Asn Phe	Val Asp Ser Cys	Leu Gln Lys Ile	Pro Gln Asp Arg
85	90	95	
Pro Thr Ser Glu	Val Leu Leu Lys	His Arg Phe Val	Leu Arg Glu Arg
100	105	110	
Pro Pro Thr Val	Ile Met Asp Leu	Ile Gln Arg Thr	Lys Asp Ala Val
115	120	125	
Arg Glu Leu Asp	Asn Leu Gln Tyr	Arg Lys Met Lys	Lys Ile Leu Phe
130	135	140	
Gln Glu Ala Pro	Asn Gly Pro Gly	Ala Glu Ala Pro	Glu Glu Glu
145	150	155	160
Glu Ala Glu Pro	Tyr Met His Arg	Ala Gly Thr Leu	Thr Ser Leu Glu
165	170	175	
Ser Ser His Ser	Val Pro Ser Met	Ser Ile Ser Ala	Ser Ser Gln Ser
180	185	190	
Ser Ser Val Asn	Ser Leu Ala Asp	Ala Ser Asp Asn	Glu Glu Glu
195	200	205	
Glu Glu Glu Glu	Glu Glu Glu Glu	Gly Pro Glu Ala	Arg
210	215	220	
Glu Met Ala Met	Met Gln Glu Gly	Glu His Thr Val	Thr Ser His Ser
225	230	235	240
Ser Ile Ile His	Arg Leu Pro Gly	Ser Asp Asn Leu	Tyr Asp Asp Pro
245	250	255	
Tyr Gln Pro Glu	Ile Thr Pro Ser	Pro Leu Gln Pro	Pro Ala Ala Pro
260	265	270	
Ala Pro Thr Ser	Thr Thr Ser Ser	Ala Arg Arg Ala	Tyr Cys Arg
275	280	285	
Asn Arg Asp His	Phe Ala Thr Ile	Arg Thr Ala Ser	Leu Val Ser Arg
290	295	300	
Gln Ile Gln Glu	His Gln Gln Asp	Ser Ala Leu Arg	Glu Gln Leu Ser
305	310	315	320
Gly Tyr Lys Arg	Met Arg Arg Gln	His Gln Lys Gln	Leu Leu Ala Leu
325	330	335	
Glu Ser Arg Leu	Arg Gly Glu Arg	Glu His Ser Ala	Arg Leu Gln
340	345	350	
Arg Glu Leu Glu	Ala Gln Arg Ala	Gly Phe Gly Ala	Glu Ala Glu Lys
355	360	365	
Leu Ala Arg Arg	His Gln Ala Ile	Gly Glu Lys Glu	Ala Arg Ala Ala
370	375	380	
Gln Ala Glu Glu	Arg Lys Phe Gln	Gln His Ile Leu	Gly Gln Gln Lys
385	390	395	400
Lys Glu Leu Ala	Ala Leu Leu Glu	Ala Gln Lys Arg	Thr Tyr Lys Leu
405	410	415	
Arg Lys Glu Gln	Leu Lys Glu Glu	Leu Gln Glu Asn	Pro Ser Thr Pro
420	425	430	
Lys Arg Glu Lys	Ala Glu Trp Leu	Leu Arg Gln Lys	Glu Gln Leu Gln

435					440					445					
Gln	Cys	Gln	Ala	Glu	Glu	Glu	Ala	Gly	Leu	Leu	Arg	Arg	Gln	Arg	Gln
450					455					460					
Tyr	Phe	Glu	Leu	Gln	Cys	Arg	Gln	Tyr	Lys	Arg	Lys	Met	Leu	Leu	Ala
465					470					475					480
Arg	His	Ser	Leu	Asp	Gln	Asp	Leu	Leu	Arg	Glu	Asp	Leu	Asn	Lys	Lys
485					490					495					
Gln	Thr	Gln	Lys	Asp	Leu	Glu	Cys	Ala	Leu	Leu	Leu	Arg	Gln	His	Glu
500					505					510					
Ala	Thr	Arg	Glu	Leu	Glu	Leu	Arg	Gln	Leu	Gln	Ala	Val	Gln	Arg	Thr
515					520					525					
Arg	Ala	Glu	Leu	Thr	Arg	Leu	Gln	His	Gln	Thr	Glu	Leu	Gly	Asn	Gln
530					535					540					
Leu	Glu	Tyr	Asn	Lys	Arg	Arg	Glu	Gln	Glu	Leu	Arg	Gln	Lys	His	Ala
545					550					555					560
Ala	Gln	Val	Arg	Gln	Gln	Pro	Lys	Ser	Leu	Lys	Val	Arg	Ala	Gly	Gln
565					570					575					
Arg	Pro	Pro	Gly	Leu	Pro	Leu	Pro	Ile	Pro	Gly	Ala	Leu	Gly	Pro	Pro
580					585					590					
Asn	Thr	Gly	Thr	Pro	Ile	Glu	Gln	Gln	Pro	Cys	Ser	Pro	Gly	Gln	Glu
595					600					605					
Ala	Val	Leu	Asp	Gln	Arg	Met	Leu	Gly	Glu	Glu	Glu	Ala	Val	Gly	
610					615					620					
Glu	Arg	Arg	Ile	Leu	Gly	Lys	Glu	Gly	Ala	Thr	Leu	Glu	Pro	Lys	Gln
625					630					635					640
Gln	Arg	Ile	Leu	Gly	Glu	Glu	Ser	Gly	Ala	Pro	Ser	Pro	Ser	Pro	Gln
645					650					655					
Lys	His	Gly	Ser	Leu	Val	Asp	Glu	Val	Trp	Gly	Leu	Pro	Glu	Glu	
660					665					670					
Ile	Glu	Glu	Leu	Arg	Val	Pro	Ser	Leu	Val	Pro	Gln	Arg	Ser	Ile	
675					680					685					
Val	Gly	Gln	Glu	Glu	Ala	Gly	Thr	Trp	Ser	Leu	Trp	Gly	Lys	Glu	Asp
690					695					700					
Glu	Ser	Leu	Leu	Asp	Glu	Glu	Phe	Glu	Leu	Gly	Trp	Val	Gln	Gly	Pro
705					710					715					720
Ala	Leu	Thr	Pro	Val	Pro	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly	Ala	
725					730					735					
Pro	Ile	Gly	Thr	Pro	Arg	Asp	Pro	Gly	Asp	Gly	Cys	Pro	Ser	Pro	Asp
740					745					750					
Ile	Pro	Pro	Glu	Pro	Pro	Pro	Thr	His	Leu	Arg	Pro	Cys	Pro	Ala	Ser
755					760					765					
Gln	Leu	Pro	Gly	Leu	Leu	Ser	His	Gly	Leu	Leu	Ala	Gly	Leu	Ser	Phe
770					775					780					
Ala	Val	Gly	Ser	Ser	Ser	Gly	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Leu
785					790					795					800
Leu	Pro	Leu	Leu	Ala	Ala	Gln	Gly	Gly	Gly	Gly	Leu	Gln	Ala	Ala	Leu
805					810					815					
Leu	Ala	Leu	Glu	Val	Gly	Leu	Val	Gly	Leu	Gly	Ala	Ser	Tyr	Leu	Leu
820					825					830					
Leu	Cys	Thr	Ala	Leu	His	Leu	Pro	Ser	Ser	Leu	Phe	Leu	Leu	Leu	Ala
835					840					845					
Gln	Gly	Thr	Ala	Leu	Gly	Ala	Val	Leu	Gly	Leu	Ser	Trp	Arg	Arg	Gly
850					855					860					
Leu	Met	Gly	Val	Pro	Leu	Gly	Leu	Gly	Ala	Ala	Trp	Leu	Leu	Ala	Trp


```

865                      870                      875                      880
Pro Gly Leu Ala Leu Pro Leu Val Ala Met Ala Ala Gly Gly Arg Trp
                        885                      890                      895
Val Arg Gln Gln Gly Pro Arg Val Arg Arg Gly Ile Ser Arg Leu Trp
                        900                      905                      910
Leu Arg Val Leu Leu Arg Leu Ser Pro Met Ala Phe Arg Ala Leu Gln
                        915                      920                      925
Gly Cys Gly Ala Val Gly Asp Arg Gly Leu Phe Ala Leu Tyr Pro Lys
                        930                      935                      940
Thr Asn Lys Asp Gly Phe Arg Ser Arg Leu Pro Val Pro Gly Pro Arg
945                      950                      955                      960
Arg Arg Asn Pro Arg Thr Thr Gln His Pro Leu Ala Leu Leu Ala Arg
                        965                      970                      975
Val Trp Val Leu Cys Lys Gly Trp Asn Trp Arg Leu Ala Arg Ala Ser
                        980                      985                      990
Gln Gly Leu Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala
                        995                      1000                      1005
Ser Trp Gly Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu
1010                      1015                      1020
Leu Pro Arg Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser Arg Gln Pro
1025                      1030                      1035                      1040
Leu Pro Gly Thr Leu Ala Gly Arg Arg Ser Arg Thr Arg Gln Ser Arg
                        1045                      1050                      1055
Ala Leu Pro Pro Trp Arg
1060

```

```

<210> 117
<211> 471
<212> DNA
<213> Homo sapiens

```

```

<400> 117
naccgcttga cgatctgtct ggctgggtgta gtgactctgcg ctgtgggtgt cgctcatgac
60
ctgctcgacc ttctgcctt ggccaaggca gctggccagg tattagcggc cggcacgtgc
120
gtcacgggag gagtcgaat gttttggatc ccgctgccga actccatcat tgctttgggg
180
acgcctactt cgatcttggt gacggtgttc ttcatgtgtg tgtgcgccaa tgcgggtgaat
240
ttcattgatg gacttgacgg cctggcatcc ggtgtggtgg ccacggggtc cttggctttc
300
ttctcataca cctacgtgct ggctcacgaa caggactttg ttggtgcgac gactaccagt
360
ctcattacgg ctgcgacggc gggcgccctgt ctgcgttttt tgcccccaa ctggcatccg
420
gcgaggatgt tcattgggtga ttccggagct ctgctacttg gcttattgct a
471

```

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<210> 118
<211> 157
<212> PRT
<213> Homo sapiens

```

```

<400> 118
Xaa Ala Leu Thr Ile Cys Leu Ala Gly Val Val Ile Cys Ala Val Gly
 1           5           10           15
Val Val Asp Asp Leu Leu Asp Leu Pro Ala Leu Ala Lys Ala Ala Gly
          20           25           30
Gln Val Leu Ala Ala Gly Ile Val Val Thr Gly Gly Val Arg Met Phe
          35           40           45
Trp Ile Pro Leu Pro Asn Ser Ile Ile Ala Leu Gly Thr Pro Thr Ser
          50           55           60
Ile Leu Val Thr Val Phe Phe Ile Val Leu Cys Ala Asn Ala Val Asn
          65           70           75           80
Phe Ile Asp Gly Leu Asp Gly Leu Ala Ser Gly Val Val Ala Ile Gly
          85           90           95
Ser Leu Ala Phe Phe Ser Tyr Thr Tyr Leu Leu Ala His Glu Gln Asp
          100          105          110
Phe Val Val Ala Thr Thr Thr Ser Leu Ile Thr Ala Ala Thr Ala Gly
          115          120          125
Ala Cys Leu Gly Phe Leu Pro His Asn Trp His Pro Ala Arg Met Phe
          130          135          140
Met Gly Asp Ser Gly Ala Leu Leu Leu Gly Leu Leu Leu
          145          150          155

```

<210> 119

<211> 302

<212> DNA

<213> Homo sapiens

<400> 119

```

ntcaaacatg agcagtcgtg gcggccgagg ccgcgggtggc tattatcgcg agctttatgg
60
tagccgaggt cgaggcagta aatctaataa aactttcgca aaaaattcgg atgtctactc
120
tcagaaaaag actcgaacag tacgaggcac ctccgaagat ttagcacgat cgctccataa
180
gcttcatatg cgcccgtacc ctgcgtatca tgacattgag ggtatgtggg ctttcccagc
240
ctttactttt tatctggatc atgcacaagc agaccctaac gctgccccaa ataaggcacg
300
cn
302

```

<210> 120

<211> 98

<212> PRT

<213> Homo sapiens

<400> 120

```

Met Ser Ser Arg Gly Gly Arg Gly Gly Tyr Tyr Arg Glu Leu
 1           5           10           15
Tyr Gly Ser Arg Gly Arg Gly Ser Lys Ser Asn Glu Thr Phe Ala Lys
          20           25           30
Asn Ser Asp Val Tyr Ser Gln Lys Lys Thr Arg Thr Val Arg Gly Thr
          35           40           45
Ser Glu Asp Leu Ala Arg Ser Leu His Lys Leu His Met Arg Pro Tyr

```

```

      50              55              60
Pro Ala Tyr His Asp Ile Glu Gly Met Trp Ala Phe Pro Ala Phe Thr
65              70              75              80
Phe Tyr Leu Asp His Ala Gln Ala Asp Pro Tyr Ala Ala Pro Asn Lys
      85              90              95
Ala Arg

```

<210> 121
 <211> 318
 <212> DNA
 <213> Homo sapiens

```

<400> 121
ngcatggggg gccctggggc cgcacttggtg cccctttttt ttttagggaa aaaattgagc
60
cctaaggat ttgccgcatt acaggaaagt ttttggtaa gtttggggtt gtttctgtgc
120
tgtgtgagaa ggagtagaag cagctccagt agagtgggcc ttttcatttt tatccagagg
180
aaattttagt gctgtggcta ttacttcctt ttttttcttt tttttttttg ttttagagaca
240
gagttctgnt ctgtcgccag gctggagtga agtggcaca tctcagctca ctgcaacctc
300
tgcctcccg gttcaagc
318

```

<210> 122
 <211> 89
 <212> PRT
 <213> Homo sapiens

```

<400> 122
Xaa Met Gly Gly Pro Gly Thr Ala Leu Val Pro Leu Phe Phe Leu Gly
1              5              10              15
Lys Lys Leu Ser Pro Lys Gly Phe Ala Ala Leu Gln Glu Ser Phe Leu
20              25              30
Val Ser Leu Gly Leu Phe Leu Cys Cys Val Arg Arg Ser Arg Ser Ser
35              40              45
Ser Ser Arg Val Gly Leu Phe Ile Phe Ile Gln Arg Lys Phe Val Gly
50              55              60
Cys Gly Tyr Tyr Phe Leu Phe Phe Leu Phe Phe Phe Cys Leu Glu Thr
65              70              75              80
Glu Ser Xaa Ser Val Ala Arg Leu Glu
      85

```

<210> 123
 <211> 338
 <212> DNA
 <213> Homo sapiens

```

<400> 123
acgcgtctag ggtagaaatc aactccagta actgtcatc aacctcagca atgctgggga
60

```

cgggcagagg cagggcagct gtgtgccaca ttctgccag ggctgggtcag gccccggctc
 120
 tcaccactec tctccctgc tttgaacctg tggaacaaag ggccctgca ccccaactca
 180
 ttctctctttg ccacataagg gcctcaagtc atgtgtgccc ctctgcttg gttgcttttt
 240
 ctccctctgc ttgggtcact gtccacacca ctggccactt tctcaggga agggccctca
 300
 ctgcccacac acctaaacat gcccctgct cctccata
 338

<210> 124

<211> 96

<212> PRT

<213> Homo sapiens

<400> 124

Met	Leu	Gly	Thr	Gly	Arg	Gly	Arg	Ala	Ala	Val	Cys	His	Ile	Pro	Ala
1				5					10					15	
Arg	Ala	Gly	Gln	Ala	Pro	Ala	Leu	Thr	Thr	Pro	Pro	Pro	Cys	Phe	Glu
			20					25					30		
Pro	Val	Glu	Gln	Arg	Ala	Pro	Ala	Pro	Gln	Leu	Ile	Pro	Leu	Cys	His
			35				40					45			
Ile	Arg	Ala	Ser	Ser	His	Ala	Val	Pro	Ser	Ala	Trp	Val	Ala	Phe	Ser
			50			55					60				
Pro	Ser	Ala	Trp	Val	Thr	Val	His	Thr	Thr	Gly	His	Phe	Pro	Gln	Gly
65					70					75				80	
Arg	Ala	Leu	Thr	Ala	His	Thr	Pro	Lys	His	Ala	Pro	Cys	Ser	Ser	Ile
				85					90					95	

<210> 125

<211> 280

<212> DNA

<213> Homo sapiens

<400> 125

ccattgacct ggccagccac catcacctgc ctcttgctc acccaccctg ggtgcttgcc
 60
 ggcaaggatt ggagggcaga ctgctggagc gtgagaccag gccaatctgt ctttctggga
 120
 accttcagcc tccaactgga gctgactgtc aactttcggg tgagaagtca cttttctgca
 180
 ttcccaccac actatctatc tgtgcaatag ggcagcgtga cagcactcac cttattgagg
 240
 gcttctgctg tcttgcccca ttctggatag gcctgatcta
 280

<210> 126

<211> 92

<212> PRT

<213> Homo sapiens

<400> 126

Met Asp Leu Ala Ser His His His Leu Pro Pro Ala Ser Pro Thr Leu

```

      1           5           10           15
Gly Ala Cys Arg Gln Gly Leu Glu Gly Arg Leu Leu Glu Arg Glu Thr
      20           25           30
Arg Pro Ile Cys Leu Ser Gly Asn Leu Gln Pro Pro Thr Gly Ala Asp
      35           40           45
Cys Gln Leu Ser Gly Glu Lys Ser Leu Phe Cys Ile Pro Thr Thr Leu
      50           55           60
Ser Ile Cys Ala Ile Arg Gln Arg Asp Ser Thr His Leu Ile Glu Gly
      65           70           75           80
Phe Cys Cys Pro Gly Pro Phe Trp Ile Gly Leu Ile
      85           90

```

<210> 127

<211> 444

<212> DNA

<213> Homo sapiens

<400> 127

```

cgcgatgatcg ccgtggcgga gggccgcgcc gccgactcga tcgcccagct gacaaccgag
60
ctgcaaaagcc gtcactgccc tgcggagcag atcacgtccg tcagcatcga catgtcgcca
120
gcggttcacga ggggctgcgc cgagcacctg cccaacgcgc ggcacacctt gcacaagttc
180
cacgtcatcgc ggcacgccaa tgcggccgctg gacaggatgc gccgcatcga gcagcgcagc
240
gacaagtccc tcaaggggat gcgctggtcg ctgctgaaga accgcgccag cctcaagccc
300
gaggctgcgc ccgatctgga tgcctgata gccaggatgg cactgtgcgc caccgcgcgc
360
gcctgggtct acaaggagca gctgcgcgag atcctcgcgc gcaagcagat caacgtggca
420
cgcgacatgc tcaagcactg gtgc
444

```

<210> 128

<211> 148

<212> PRT

<213> Homo sapiens

<400> 128

```

Arg Val Ile Ala Val Ala Glu Gly Arg Gly Ala Asp Ser Ile Ala Gln
      1           5           10           15
Leu Thr Thr Glu Leu Gln Ser Arg His Cys Pro Ala Glu Gln Ile Thr
      20           25           30
Ser Val Ser Ile Asp Met Ser Pro Ala Phe Ile Arg Gly Cys Ala Glu
      35           40           45
His Leu Pro Asn Ala Arg Val Thr Phe Asp Lys Phe His Val Ile Gly
      50           55           60
His Ala Asn Ala Ala Val Asp Arg Met Arg Arg Ile Glu Gln Arg Ser
      65           70           75           80
Asp Lys Ser Leu Lys Gly Met Arg Trp Ser Leu Leu Lys Asn Arg Ala
      85           90           95
Ser Leu Lys Pro Glu Ala Ala Ala Asp Leu Asp Ala Leu Ile Ala Arg

```

```

          100          105          110
Met Ala Thr Val Arg Thr Ala Arg Ala Trp Val Tyr Lys Glu Gln Leu
          115          120          125
Arg Glu Ile Leu Ala Arg Lys Gln Ile Asn Val Ala Arg Asp Met Leu
          130          135          140
Lys His Trp Cys
145

```

```

<210> 129
<211> 291
<212> DNA
<213> Homo sapiens

```

```

<400> 129
gaggaggagac gtaccgtccc cggtatagcc aagctcgaga agccgcaagc tatcgagaac
60
ttggacgaga ttattgacgt ctttgacgcc gtcattggtg cccgtggcga tatggccgtc
120
gagtgcccgcc tcgaggaagt tccgctgacg caaaagcaga tcacgcagaa ggctcgttta
180
caggctaagc ccgtcattgt ggccaccacg atgcttgagt cgatgatcca cgctccccgt
240
ccgacccgcg ctgaggccgc cgacgtcgcg aacgccatcc ttgacggcgc g
291

```

```

<210> 130
<211> 97
<212> PRT
<213> Homo sapiens

```

```

<400> 130
Glu Glu Gly Arg Thr Val Pro Val Ile Ala Lys Leu Glu Lys Pro Gln
1          5          10          15
Ala Ile Glu Asn Leu Asp Glu Ile Ile Asp Val Phe Asp Ala Val Met
          20          25          30
Val Ala Arg Gly Asp Met Ala Val Glu Cys Pro Leu Glu Glu Val Pro
          35          40          45
Leu Ile Gln Lys Gln Ile Ile Glu Lys Ala Arg Leu Gln Ala Lys Pro
          50          55          60
Val Ile Val Ala Thr Gln Met Leu Glu Ser Met Ile His Ala Pro Arg
          65          70          75          80
Pro Thr Arg Ala Glu Ala Ala Asp Val Ala Asn Ala Ile Leu Asp Gly
          85          90          95
Ala

```

```

<210> 131
<211> 416
<212> DNA
<213> Homo sapiens

```

```

<400> 131
tccggagcgt ccgtggccct catgggtgtg tcagcgtggt tgctgtctcg ggccgcagag
60

```

attccaccgg tgcctacct ggaggccgca gccgtcgggg ttcgattctt cggcatctcc
 120
 cgcggtgtct tccgctacgc cgaacgtctg gtaggccacg acctggctct gcggatgcag
 180
 ggggcattgc ggatgcgggt ctacgaccgg ctgtcacgta ccnacctgc tgggnnaccg
 240
 cgcgggggtg acctgctggt acgggttact gccgacgtcg acgcggtggt ggacatggtc
 300
 gtgcgggtga tcgtccgggc gtgcgcgtca agcctcgta tcattggcac caccgtcctt
 360
 ctttgtccga gagaaggttg agttttctta gccggattcc aacacagcct gggggg
 416

<210> 132
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 132
 Ser Gly Ala Ser Val Ala Leu Met Gly Val Ser Ala Trp Leu Leu Ser
 1 5 10 15
 Arg Ala Ala Glu Ile Pro Pro Val Leu Tyr Leu Glu Ala Ala Val
 20 25 30
 Gly Val Arg Phe Phe Gly Ile Ser Arg Gly Val Phe Arg Tyr Ala Glu
 35 40 45
 Arg Leu Val Gly His Asp Leu Ala Leu Arg Met Gln Gly Ala Leu Arg
 50 55 60
 Met Arg Val Tyr Asp Arg Leu Ser Arg Thr Xaa Pro Ala Gly Xaa Arg
 65 70 75 80
 Arg Arg Gly Asp Leu Leu Val Arg Val Thr Ala Asp Val Asp Ala Val
 85 90 95
 Leu Asp Met Val Val Arg Val Ile Val Pro Ala Cys Ala Ser Ser Leu
 100 105 110
 Val Ile Ile Gly Thr Thr Val Leu Leu Cys Pro Arg Glu Gly
 115 120 125

<210> 133
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 133
 gccgttgcta tcgctgctgg tatgcgtgca gacgtcactg tttttgatat caatatcgct
 60
 gcgttgaaga gactcgccga catctaccag ggtcgtgttc acacagtagt atccaccgcg
 120
 gccgaaattg cgaaggcgct agaaaccgct gacgttgtga tcggttctgt ccttattccg
 180
 ggtagttcta ccccgaaagt tgttactacc gatatgggtg ctccatgca gcctgggtct
 240
 gttcttattg atattgctat agaccaaggc ggctgcttcg aggattcgca cccaccact
 300
 tacgatgacc ccactttcac tgtgcac
 327

<210> 134
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 134
 Ala Val Ala Ile Ala Ala Gly Met Arg Ala Asp Val Thr Val Phe Asp
 1 5 10 15
 Ile Asn Ile Ala Ala Leu Lys Arg Leu Ala Asp Ile Tyr Gln Gly Arg
 20 25 30
 Val His Thr Val Val Ser Thr Arg Ala Glu Ile Ala Lys Ala Leu Glu
 35 40 45
 Thr Ala Asp Val Val Ile Gly Ser Val Leu Ile Pro Gly Ser Ser Thr
 50 55 60
 Pro Lys Leu Val Thr Thr Asp Met Val Ala His Met Gln Pro Gly Ser
 65 70 75 80
 Val Leu Ile Asp Ile Ala Ile Asp Gln Gly Gly Cys Phe Glu Asp Ser
 85 90 95
 His Pro Thr Thr Tyr Asp Asp Pro Thr Phe Thr Val His
 100 105

<210> 135
 <211> 560
 <212> DNA
 <213> Homo sapiens

<400> 135
 taagatgtgg tcctgccctg ttectgaagg ggctgcagct ctgatggaaa atacagggat
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 ttactactcag ggctacagcc acggggggct gaggcccaag gctgcaatct cgggggaagg
 120
 ggaagtgtgg ttttctctgt ggattggaaa catcctcttg gaggcaaaaga cttttctctg
 180
 atcttacaga cttcccgga ttttagatt agaattattg gggcaaaagg ggctgtcttg
 240
 ttttaaagca atgctacata gacacagtgg ggaagacctg gttcgacggc agataagcag
 300
 tgggtgatgg gcttgaggag gagagtcagg gcaaagtcta agactgagca gaaaggaatt
 360
 ccccatctc ccatggataa gtacgttcta gaacattctc tttgggtcta atactctgaa
 420
 atgacatctt gtcttcatgc tcgagagaga attacttcaac tgggtccact tggagtccca
 480
 gtgttcagac accaagcctg actgggaggg ttccgttttc ttaacacctt cccaccgccg
 540
 acttccaagt cccacgcgt
 560

<210> 136
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 136

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Met Trp Ser Cys Pro Val Pro Glu Gly Ala Ala Ala Leu Met Glu Asn
 1           5           10           15
Thr Gly Ile Tyr Thr Gln Gly Tyr Ser His Gly Gly Leu Arg Pro Lys
      20           25           30
Ala Ala Ile Ser Gly Glu Gly Glu Val Gly Phe Ser Trp Trp Ile Gly
      35           40           45
Asn Ile Leu Leu Glu Ala Lys Thr Phe Pro Gly Ser Tyr Arg Leu Pro
      50           55           60
Gly Ile Phe Arg Leu Glu Tyr Trp Gly Gln Arg Arg Leu Ser Cys Phe
65           70           75           80
Lys Ala Met Leu His Arg His Ser Gly Glu Asp Leu Val Arg Arg Gln
      85           90           95
Ile Ser Ser Gly
      100

```

<210> 137

<211> 429

<212> DNA

<213> Homo sapiens

<400> 137

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accggttgga tggcctgcag gccaaagcgt tcttgcaaac tcagcaggcc ttcagcgcaa
60
gaggcaaaaca gctggctcgc cacctgcttg aggtccaccc attgcgcata gcccttgagc
120
aaggcgcgcc agttggtttt gtgcggccact tggctgcgga acagggtcttc gacaaaaaccg
180
gactgctggc gggtcgcaac gcgcatgata ggcagcgccct ggctggcgcc ctggctcgagc
240
cagcgcgctg gcagttgggt ggcccggtg ataccgacct tgatccccga cgaattggcc
300
aggtacacca catggtcggg catgcagaat gtttcgcccc agccgggata acggcaagtg
360
ccggcgctgt aatggcaacg ttcggggctc atgatgcaca ggtcacactg ggccagcttg
420
gtcatgccc
429

```

<210> 138

<211> 141

<212> PRT

<213> Homo sapiens

<400> 138

```

Met Thr Lys Leu Ala Gln Cys Asp Leu Cys Ile Met Ser Pro Glu Arg
 1           5           10           15
Cys His Tyr Asp Ala Gly Thr Cys Arg Asp Pro Gly Trp Gly Glu Thr
      20           25           30
Phe Cys Met Thr Asp His Val Val Tyr Leu Ala Asn Ser Ser Gly Ile
      35           40           45
Lys Val Gly Ile Thr Arg Ala Thr Gln Leu Pro Thr Arg Trp Leu Asp
50           55           60
Gln Gly Ala Ser Gln Ala Leu Pro Ile Met Arg Val Ala Thr Arg Gln

```

```

65              70              75              80
Gln Ser Gly Phe Val Glu Asp Leu Phe Arg Ser Gln Val Ala Asp Lys
              85              90              95
Thr Asn Trp Arg Ala Leu Leu Lys Gly Asp Ala Gln Ser Val Asp Leu
              100              105              110
Lys Gln Val Arg Asp Gln Leu Phe Ala Ser Cys Ala Glu Gly Leu Leu
              115              120              125
Ser Leu Gln Glu Arg Phe Gly Leu Gln Ala Ile Gln Pro
              130              135              140

```

<210> 139

<211> 341

<212> DNA

<213> Homo sapiens

<400> 139

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acgcgtcggt tgaaggcttg atccgcacgt ccaattcgct ttgcgccaat gcgcgcgagc
60
ttgtgaacag cagaatcaag ccgctggtta atcttcctgg gagcttcata ggcgggggatg
120
ctacacgagc tgggggagaca ctttgaaccc ggaattgtct gaataattct gtctcaaacc
180
tttcgagcct gtaacgactg aggggttcgga tggaaaaaca catgctccag gatgggacgc
240
acggccactt caccgatctc ttcatagccc tggcgtttgt agaaatccag gtacgcgcaa
300
tcgccagcgt cgagcacgac gcctgatgag tgcgggtcat t
341

```

<210> 140

<211> 113

<212> PRT

<213> Homo sapiens

<400> 140

```

Met Thr Arg Thr His Gln Ala Ser Cys Ser Thr Leu Ala Ile Arg Ala
1              5              10              15
Thr Trp Ile Ser Thr Asn Ala Arg Ala Met Lys Arg Ser Val Lys Trp
20              25              30
Pro Ser Val Pro Ser Trp Ser Met Cys Phe Ser Ile Arg Thr Leu Ser
35              40              45
Arg Tyr Arg Leu Gln Arg Phe Glu Thr Glu Leu Phe Arg Gln Phe Arg
50              55              60
Val Gln Ser Val Ser Pro Ala Arg Val Ala Ser Pro Pro Met Lys Leu
65              70              75              80
Pro Gly Arg Phe Thr Ser Gly Leu Ile Leu Leu Phe Thr Ser Cys Gly
85              90              95
Ala Leu Ala Gln Ser Glu Leu Asp Val Arg Ile Lys Pro Ser Asn Asp
100              105              110
Ala

```

<210> 141

<211> 324

<212> DNA

<213> Homo sapiens

<400> 141

gaattcctct tggatagctt cgggtaaatg ggtacagcaa atatcaggag cgcaaccgca
 60
 acctttactt actggtacat gaacaccatt tacattacag ctatcgtact caccaccagt
 120
 catgtgaaca gacacataac tgaaagggtt ataaaccaca gtctcacggt acgtatgacc
 180
 gtcaactgtg aacaccgcta agtaatagcc tgcggggggt tgcataaact cctttgacca
 240
 tgcgtaataa atacgtccgt cattagtacac acctgatggg gcgaacaaaa aagaacggca
 300
 gcagttatca ccgcccatac gcgt
 324

<210> 142

<211> 106

<212> PRT

<213> Homo sapiens

<400> 142

Met	Gly	Gly	Asp	Asn	Cys	Cys	Arg	Ser	Phe	Cys	Phe	Ala	Pro	Ser	Gly
1				5					10					15	
Val	Thr	Asn	Asp	Gly	Arg	Ile	Tyr	Tyr	Ala	Trp	Ser	Lys	Glu	Phe	Met
		20						25					30		
Gln	Ala	Pro	Ala	Gly	Tyr	Tyr	Leu	Ala	Val	Phe	Thr	Val	Asp	Gly	His
		35					40					45			
Thr	Tyr	Arg	Glu	Thr	Val	Val	Tyr	Lys	Pro	Phe	Ser	Tyr	Val	Ser	Val
		50					55				60				
His	Met	Thr	Trp	Gly	Glu	Tyr	Asp	Ser	Cys	Asn	Val	Asn	Gly	Val	His
65					70					75				80	
Val	Pro	Val	Ser	Lys	Gly	Cys	Gly	Cys	Ala	Pro	Asp	Ile	Cys	Cys	Thr
			85						90					95	
His	Leu	Pro	Glu	Ala	Ile	Gln	Glu	Glu	Phe						
			100						105						

<210> 143

<211> 1325

<212> DNA

<213> Homo sapiens

<400> 143

nacgctgga tctgccagct gagcctggag ctgtgcaggc agctgccctg ctacgatgag
 60
 gcaccccagg agaagaactt cctgtacaaa tgcataggca ccacctggg tgcgtgcttca
 120
 agtaaggagg tggtagggaa gcaccttcaa gagctgtctg agacggccag ataccaggag
 180
 gaggcagaac gcgaggcctc cgctgtctgc ttccggatct gtgccatctc ccacctcgag
 240
 gacacgtctg ccagctgga ggaactctgt aggtcagagg tcttcagaaa atccattggc
 300

attctcaaca tttttaagga tcgaagttag aacgaagtgg agaaggtgaa gagtgctctg
 360
 atcctgtgct atgggcacgt ggcggcccg gcccccgagg agctgggtgct ggccaaggtg
 420
 gagtcagaca tcctccggaa catcntgccg gcacttcagc acnncaagga cccagccctg
 480
 aagctgtgcc ttgtccagag tgtgtgcatg gtcagcccg ccatctgcag cagcaccag
 540
 gctggctcct tccacttcac ccggaagaca gagctggtgg cacagatgat ggagttcate
 600
 agggcagagc ccccgactc cttgaggaca cctattcgga agaaagccat gctcacctgc
 660
 acttacttgg tctcgtgga gccagcgtg gacgagcagg cccggggcga tgtgatccat
 720
 ggctgcctgc acagcatcat ggcctgtgct cctgagccca aggaggagga cggaggtgctg
 780
 cagaagtccc tgtatctgga gacactgcac gccttgagg atctgctgac gagcctcctg
 840
 cagcggaaca tgacccccca aggcctgcag atcatgattg agcacctgag cccatggatc
 900
 aagtcctcaa gaggtcacgt agcggcgctg gccttaggcc tgagcgccct cctcgtgcgc
 960
 tacttctcgg agcacctgcg tgtcagtggc gcccaagtag ataccaggtt tccatctgag
 1020
 cccagatacc tgtgcaatgg ccctggtgcc ctccacaac ctgggccttc tcactcgccct
 1080
 cttctcccca cggtgtgcgg acctgtggcc tgccaccgcg caggaggccg tggactgtgt
 1140
 ctactccctg ctgtacctcc agctcggcta tgagggtctc tccggggact accgcgatga
 1200
 cgtggcggag cggtcctcca gcctcaagga cggcctcgtg caccctgacc ccgccattct
 1260
 cttccacacc tgccacagt taggccagat tattgccaag cgctccccc cagcccttca
 1320
 cgcgt
 1325

<210> 144
 <211> 390
 <212> PRT
 <213> Homo sapiens

<400> 144
 Xaa Ala Trp Ile Cys Gln Leu Ser Leu Glu Leu Cys Arg Gln Leu Pro
 1 5 10 15
 Cys Tyr Asp Glu Ala Pro Gln Glu Lys Asn Phe Leu Tyr Lys Cys Ile
 20 25 30
 Gly Thr Thr Leu Gly Ala Ala Ser Ser Lys Glu Val Val Arg Lys His
 35 40 45
 Leu Gln Glu Leu Leu Glu Thr Ala Arg Tyr Gln Glu Glu Ala Glu Arg
 50 55 60
 Glu Gly Leu Ala Cys Cys Phe Gly Ile Cys Ala Ile Ser His Leu Glu
 65 70 75 80
 Asp Thr Leu Ala Gln Leu Glu Asp Phe Val Arg Ser Glu Val Phe Arg

85										90					95				
Lys	Ser	Ile	Gly	Ile	Leu	Asn	Ile	Phe	Lys	Asp	Arg	Ser	Glu	Asn	Glu				
100										105					110				
Val	Glu	Lys	Val	Lys	Ser	Ala	Leu	Ile	Leu	Cys	Tyr	Gly	His	Val	Ala				
115										120					125				
Ala	Arg	Ala	Pro	Arg	Glu	Leu	Val	Leu	Ala	Lys	Val	Glu	Ser	Asp	Ile				
130										135					140				
Leu	Arg	Asn	Ile	Xaa	Pro	Ala	Leu	Gln	His	Xaa	Lys	Asp	Pro	Ala	Leu				
145										150					155				
Lys	Leu	Cys	Leu	Val	Gln	Ser	Val	Cys	Met	Val	Ser	Arg	Ala	Ile	Cys				
160										165					170				
Ser	Ser	Thr	Gln	Ala	Gly	Ser	Phe	His	Phe	Thr	Arg	Lys	Ala	Glu	Leu				
175										180					185				
Val	Ala	Gln	Met	Met	Glu	Phe	Ile	Arg	Ala	Glu	Pro	Pro	Asp	Ser	Leu				
190										195					200				
Arg	Thr	Pro	Ile	Arg	Lys	Lys	Ala	Met	Leu	Thr	Cys	Thr	Tyr	Leu	Val				
205										210					215				
Ser	Val	Glu	Pro	Ala	Leu	Asp	Glu	Gln	Ala	Arg	Ala	Asp	Val	Ile	His				
220										225					230				
Gly	Cys	Leu	His	Ser	Ile	Met	Ala	Leu	Leu	Pro	Glu	Pro	Lys	Glu	Glu				
235										240					245				
Asp	Gly	Gly	Cys	Gln	Lys	Ser	Leu	Tyr	Leu	Glu	Thr	Leu	His	Ala	Leu				
250										255					260				
Glu	Asp	Leu	Leu	Thr	Ser	Leu	Leu	Gln	Arg	Asn	Met	Thr	Pro	Gln	Gly				
265										270					275				
Leu	Gln	Ile	Met	Ile	Glu	His	Leu	Ser	Pro	Trp	Ile	Lys	Ser	Pro	Arg				
280										285					290				
Gly	His	Val	Ala	Ala	Arg	Ala	Leu	Gly	Leu	Ser	Ala	Leu	Leu	Val	Arg				
295										300					305				
Tyr	Phe	Leu	Glu	His	Leu	Arg	Val	Ser	Gly	Ala	Gln	Val	Asp	Thr	Arg				
310										315					320				
Phe	Pro	Ser	Glu	Pro	Arg	Ile	Leu	Cys	Asn	Gly	Pro	Gly	Ala	Leu	Pro				
325										330					335				
Gln	Pro	Gly	Pro	Ser	His	Arg	Pro	Leu	Leu	Pro	Thr	Val	Cys	Gly	Pro				
340										345					350				
Val	Ala	Cys	His	Pro	Pro	Gly	Gly	Arg	Gly	Leu	Cys	Leu	Leu	Pro	Ala				
355										360					365				
Val	Pro	Pro	Ala	Arg	Leu														
370										375					380				
Val	Pro	Pro	Ala	Arg	Leu														
385										390					395				

<210> 145

<211> 802

<212> DNA

<213> Homo sapiens

<400> 145

cggcgcgtcta ggtccggtc agtgcgctgt tgtcgcgcgt agaacacgag gctgcgcaag
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cataagcaga cgtagagagt ggtcacatcc atgtcgatgg tgtgcgcgta atgaaggtct
120
acatcacctt ggtgaaggcc tgcaccacta gcgtcggcac catttccccg cgtcggacaa
180
gacatcatgc cccatatctt gacagaatgt ctgacatgag tatgccacgc cgagcagcac
240

cagaggacga caccgatctg gcggacgccg ccggttcagc gcgcagatac ctcatcctcg
 300
 tcatttggtg cggtatcgct gctgtcctcg gactaggcat ttccgggtat cttgcgtggt
 360
 ggtcattgtg cgatcaagct gccgggggtct gtcagcgtgg tgaaccggtt atgtactggt
 420
 gttcgggtgt ctctctggcc attctcggac tcattatcgg ggtcttgacg cagatctggc
 480
 tggagaagcg ctgggtggcac atgcttgcca tcgtcatccc ggctgttttc atcgtcgccg
 540
 gtatcttttt ctggctcgcc gtctaagaag gggcgtcaca gattccacaa acgacacagg
 600
 tattgatctc cgttttatcg gctcctagca gccgtgggtca acgtatcgct atcaagcgat
 660
 acaggactcg tcgttcgcat cgttggtgtg ctgctgggaa acaatcccag cgatctactc
 720
 ggctaccgcc agacagttca ctcaaacccc ctacgcggcg cgcagacatc aaatcccatt
 780
 ctcgatagac ggcccacacc ac
 802

<210> 146

<211> 151

<212> PRT

<213> Homo sapiens

<400> 146

Met	Lys	Val	Tyr	Ile	Thr	Leu	Val	Lys	Ala	Cys	Thr	Thr	Ser	Val	Gly
1			5					10					15		
Thr	Ile	Ser	Pro	Arg	Arg	Thr	Arg	His	His	Ala	Pro	Tyr	Leu	Asp	Arg
			20				25					30			
Met	Ser	Asp	Met	Ser	Met	Pro	Arg	Arg	Ala	Ala	Pro	Glu	Asp	Asp	Thr
			35				40					45			
Asp	Leu	Ala	Asp	Ala	Ala	Arg	Ser	Trp	Arg	Arg	Tyr	Leu	Ile	Leu	Val
			50			55					60				
Ile	Cys	Gly	Val	Ile	Val	Ala	Val	Leu	Gly	Leu	Gly	Ile	Phe	Gly	Tyr
			65			70			75				80		
Leu	Ala	Trp	Trp	Ser	Leu	Cys	Asp	Gln	Ala	Ala	Gly	Val	Cys	Gln	Arg
			85					90					95		
Gly	Glu	Pro	Val	Met	Tyr	Trp	Cys	Ser	Val	Val	Ser	Leu	Ala	Ile	Leu
			100				105					110			
Gly	Leu	Ile	Ile	Gly	Val	Leu	Thr	Gln	Ile	Trp	Leu	Glu	Lys	Arg	Trp
			115			120					125				
Trp	His	Met	Leu	Ala	Ile	Val	Ile	Pro	Ala	Val	Phe	Ile	Val	Ala	Gly
			130			135					140				
Ile	Phe	Phe	Trp	Leu	Ala	Val									
			145			150									

<210> 147

<211> 368

<212> DNA

<213> Homo sapiens

<400> 147

acgcgtgaaa acggtatgac tcttctggcc ttagtagatc tgtctaaaaa acccgatgag
 60
 ttacacagc gggcattagt agcccgcat gtctcatgaca ttcctgggtc acgaaaagtt
 120
 attggtcaga aagtaccttg tgttgcatg acggggctcg aaaagggtgct tcataaaaag
 180
 gattactggg atctagcaac acctatgcca attgcgtggg gtacaacgga ccgaacagtt
 240
 attgctgatg cagcagctac aatccccacc acggagtggg atatccttgc aagactacgt
 300
 ccacgcctag aagagggttc caagcaacgt aatgatgtat tgctcctcaa cgaggaggat
 360
 ccccccta
 368

<210> 148

<211> 117

<212> PRT

<213> Homo sapiens

<400> 148

Met	Thr	Leu	Leu	Ala	Leu	Val	Asp	Leu	Ser	Lys	Lys	Pro	Asp	Glu	Phe
1				5					10					15	
Thr	Gln	Trp	Ala	Leu	Val	Ala	Arg	Asp	Val	His	Asp	Ile	Pro	Gly	Leu
			20					25					30		
Arg	Lys	Val	Ile	Gly	Gln	Lys	Val	Pro	Cys	Val	Ala	Val	Thr	Gly	Ser
			35				40					45			
Glu	Lys	Val	Leu	His	Lys	Lys	Asp	Tyr	Trp	Asp	Leu	Ala	Thr	Pro	Met
			50			55				60					
Pro	Ile	Ala	Trp	Gly	Thr	Thr	Asp	Arg	Thr	Val	Ile	Ala	Asp	Ala	Arg
					70					75				80	
Arg	Thr	Ile	Pro	Thr	Thr	Glu	Trp	Asp	Ile	Leu	Ala	Arg	Leu	Arg	Pro
				85					90					95	
Arg	Leu	Glu	Glu	Val	Arg	Lys	Gln	Arg	Asn	Asp	Val	Leu	Leu	Leu	Asn
			100					105					110		
Glu	Glu	Asp	Pro	Pro											
															115

<210> 149

<211> 407

<212> DNA

<213> Homo sapiens

<400> 149

nngctagcat ggaccctagt cacacaggca gccatacccg aggtcaaagt gacccatttt
 60
 cctaataatgg ccgctcagat ccaatacttt gaagattcgt ccgtgggttat atggccacgat
 120
 gcggtggatg gtagctgtga ccgaagtgcg gatgaaggca agtcgtgggc cccaattaag
 180
 gggcctgaac agggctcaggc gcaccttttc gtgctccatc cctacgacaa gactcaagcg
 240
 tatattctga cgcgcagcac tcagcattgg cgcacgtcga accgtggcga gacgtggcag
 300

tcattctcaa cgcctcatcc gcttacgacc ttgaaagcta tgcctctgga ctttcatccg
 360
 acgcatcatg actggatcct ttctacgggc caggcttgca cggtaaa
 407

<210> 150
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 150
 Xaa Leu Ala Trp Thr Leu Val Thr Gln Ala Ala Ile Pro Glu Val Lys
 1 5 10 15
 Val Thr His Phe Pro Asn Met Ala Ala Gln Ile Gln Tyr Phe Glu Asp
 20 25 30
 Ser Ser Val Val Ile Trp His Asp Ala Val Asp Gly Ile Val Tyr Arg
 35 40 45
 Ser Ala Asp Glu Gly Lys Ser Trp Ala Pro Ile Lys Gly Pro Glu Gln
 50 55 60
 Gly Gln Ala His Leu Phe Val Leu His Pro Tyr Asp Lys Thr Gln Ala
 65 70 75 80
 Tyr Ile Leu Thr Arg Ser Thr Gln His Trp Arg Thr Ser Asn Arg Gly
 85 90 95
 Glu Thr Trp Gln Ser Phe Ser Thr Pro His Pro Pro Thr Thr Leu Lys
 100 105 110
 Ala Met Pro Leu Asp Phe His Pro Thr His His Asp Trp Ile Leu Phe
 115 120 125
 Thr Gly Gln Ala Cys Thr Val
 130 135

<210> 151
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 151
 accggtgtcc gtggctattg ccccgaaatgg tccccatccg cgtccccggg aactccctcg
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 gcttttcgcg catccaggtc cccagcccca gctactggtg cgccccgagc ccctaggtgc
 120
 cagagcgggtg gtcggccggg ctccctgccca gtctcggttc ctccttcctc cccaccagaa
 180
 ggaaaaaactt gggcccttcg agaaccctgt ggaatgtttt ttgtaatacaa ctgtacatcc
 240
 gcttccacgg cagggcctcg tgcaaaatcg cgggtttcgg ggccctggag caaattgcgc
 300
 ttgtcagcgg cgacgtcagg aggacaaggg gaggggttcg cggctgaaac tgcagcttcg
 360
 cagcacagag ccatttttag ctgctcccca cctcgcgggg cccatgggaa gccggccccg
 420
 ggagggcgcg gctgcatgga tattcgac
 448

<210> 152

<211> 149
 <212> PRT
 <213> Homo sapiens

<400> 152
 Thr Gly Val Arg Gly Tyr Cys Pro Glu Trp Ser Pro Ser Ala Ser Pro
 1 5 10 15
 Gly Thr Pro Ser Ala Phe Arg Ala Ser Arg Ser Pro Ala Pro Ala Thr
 20 25 30
 Gly Ala Pro Arg Ala Pro Arg Cys Gln Ser Gly Gly Arg Pro Gly Ser
 35 40 45
 Cys Pro Val Ser Ala Pro Pro Ser Ser Pro Pro Glu Gly Lys Thr Trp
 50 55 60
 Ala Leu Arg Glu Pro Cys Gly Met Phe Phe Val Ile Asn Cys Thr Ser
 65 70 75 80
 Ala Ser Thr Ala Arg Pro Arg Ala Lys Ser Arg Val Ser Gly Pro Trp
 85 90 95
 Ser Lys Leu Arg Leu Ser Ala Ala Thr Ser Gly Gly Gln Gly Glu Gly
 100 105 110
 Phe Ala Ala Glu Thr Ala Ala Ser Gln His Arg Ala Ile Leu Gly Cys
 115 120 125
 Ser Pro Pro Arg Gly Ala His Gly Lys Pro Ala Pro Gly Gly Arg Gly
 130 135 140
 Cys Met Asp Ile Arg
 145

<210> 153
 <211> 440
 <212> DNA
 <213> Homo sapiens

<400> 153
 nnntgggtcc atgtatgtgt gtgtatatga gggagacacg caggtgtgtg tccgagtgtg
 60
 tgtccatggg tccatgtatg tgtgtgtata tgtgggggaa caggtgtgtg tccgagtgtg
 120
 tgcattgggtc cgtgtatatg cgtgtatatata tgcggggata tgtatatgtg tgtgtgtatg
 180
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 <212> PRT
 <213> Homo sapiens

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Cys Val Cys Ile Cys Gly Gly Thr Gly Val Cys Pro Ser Val Cys Met
20          25          30
Gly Pro Cys Ile Cys Val Tyr Ile Cys Gly Asp Met Tyr Met Cys Val
35          40          45
Cys Met Asn Arg Cys Lys Trp Gly Ala Leu Arg Cys Val Cys Val Cys
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Ser Cys Thr Arg Val
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<212> DNA
<213> Homo sapiens

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180
gcgcgcgagg aagtaaaaaa ttcgctctcc gatcacggcc gtcgcgcgag tgcacagggga
240
gaactgggca cctcgcaagc tacgccaccg cgatccatgc ccccgcccgt atcttccgcc
300
tcctctacct ccccttacc gatcagcatt atatccgac taga
344

```

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<212> PRT
<213> Homo sapiens

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20          25          30
Gln Arg His Ser Asp Asn Ala Pro Gln Glu Val Lys Ser Ser Leu Ser
35          40          45
Asp His Gly Arg Arg Ala Ser Ala Gln Gly Glu Leu Gly Thr Ser Gln
50          55          60
Ala Thr Pro Pro Arg Ser Met Pro Pro Pro Val Ser Ser Ala Ser Ser
65          70          75          80
Thr Ser Pro Leu Pro Ile Ser Ile Ile Ser Asp Leu
85          90

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<210> 157
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<212> DNA
<213> Homo sapiens

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240
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<210> 158
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 <212> PRT
 <213> Homo sapiens

<400> 158
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 35 40 45
 Asn Leu Asp Ile Thr Ile Asp Asn Val Ser Ser Asp Phe Pro Asn Tyr
 50 55 60
 Val Asn Ser Ser Tyr Ile Pro Thr Lys Gln Phe Glu Thr Cys Ser Lys
 65 70 75 80
 Thr Pro Ile Thr Phe Glu Val Glu Glu Phe Val Pro Cys Ile Pro Lys
 85 90 95
 His Thr Gln Pro Tyr Thr Ile Tyr Thr Asn His Leu Tyr Val Tyr Pro
 100 105 110
 Lys Tyr Leu Lys Tyr Asp Ser Gln Lys Ser Phe Ala Lys Ala Arg Asn
 115 120 125
 Ile Ala Ile Cys Ile Glu Phe Lys Asp Ser Asp Glu Glu Asp Ser Gln
 130 135 140
 Pro Leu Lys Cys Ile Tyr Gly Arg Pro Gly Gly Pro Val Phe Thr Arg
 145 150 155 160
 Ser Ala Phe Ala Ala Val Leu His His His Gln Asn Pro Glu Phe Tyr
 165 170 175
 Asp Glu Ile Lys Ile Glu Leu Pro Thr Gln Leu His Glu Lys His His
 180 185 190
 Leu Leu Leu Thr Phe Phe His Val Ser Cys Asp Asn Ser Ser Lys Gly
 195 200 205
 Ser Thr Lys Lys Arg Asp Val Val Glu Thr Gln Val Gly Tyr Ser Trp
 210 215 220
 Leu Pro Leu Leu Lys Asp Gly Arg Val Val Thr Ser Glu Gln His Ile
 225 230 235 240
 Pro Val Ser Ala Asn Leu Pro Ser Gly Tyr Leu Gly Tyr Gln Glu Leu
 245 250 255
 Gly Met Gly Arg His Tyr Gly Pro Glu Ile Lys Trp Val Asp Gly Gly

260 265 270
 Lys Pro Leu Leu Lys Ile Ser Thr His Leu Val Ser Thr Val Tyr Thr
 275 280 285
 Gln Asp Gln His Leu His Asn Phe Phe Gln Tyr Cys Gln Lys Thr Glu
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 Ser Gly Ala Gln Ala Leu Gly Asn Glu Leu Val Lys Tyr Leu Lys Ser
 305 310 315 320
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 325 330 335
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 370 375 380
 Lys Ala Glu Pro Tyr Val Ala Ser Glu Tyr Lys Thr Val His Glu Glu
 385 390 395 400
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 Thr Ser Asn Lys Leu Leu Lys Tyr Ser Trp Phe Phe Phe Asp Val Leu
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 Ile Lys Ser Met Ala Gln His Leu Ile Glu Asn Ser Lys Val Lys Leu
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 Leu Arg Asn Gln Arg Phe Pro Ala Ser Tyr His His Ala Val Glu Thr
 450 455 460
 Val Val Asn Met Leu Met Pro His Ile Thr Gln Lys Phe Arg Asp Asn
 465 470 475 480
 Pro Glu Ala Ser Lys Asn Ala Asn His Ser Leu Ala Val Phe Ile Lys
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 Arg Cys Phe Thr Phe Met Asp Arg Gly Phe Val Phe Lys Gln Ile Asn
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 Asn Tyr Ile Ser Cys Phe Ala Pro Gly Asp Pro Lys Thr Leu Phe Glu
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 Tyr Lys Phe Glu Phe Leu Arg Val Val Cys Asn His Glu His Tyr Ile
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 Pro Leu Asn Leu Pro Met Pro Phe Gly Lys Gly Arg Ile Gln Arg Tyr
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 Gln Asp Leu Gln Leu Asp Tyr Ser Leu Thr Asp Glu Phe Cys Arg Asn
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 His Phe Leu Val Gly Leu Leu Leu Arg Glu Val Gly Thr Ala Leu Gln
 580 585 590
 Glu Phe Arg Glu Val Arg Leu Ile Ala Ile Ser Val Leu Lys Asn Leu
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 Ala Arg Ile Ala Thr Leu Tyr Leu Pro Leu Phe Gly Leu Leu Ile Glu
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 Pro Leu Val Thr Pro Gln Lys Gly Ser Thr Leu Asp Asn Ser Leu His
 675 680 685
 Lys Asp Leu Leu Gly Ala Ile Ser Gly Ile Ala Ser Pro Tyr Thr Thr

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Ser Thr Pro Asn Ile Asn Ser Val Arg Asn Ala Asp Ser Arg Gly Ser					
705		710		715	720
Leu Ile Ser Thr Asp Ser Gly Asn Ser Leu Pro Glu Arg Asn Ser Glu					
	725		730		735
Lys Ser Asn Ser Ser Leu Asp Lys His Gln Ser Ser Thr Leu Gly Asn					
	740	745		750	
Ser Val Val Arg Cys Asp Lys Leu Asp Gln Ser Glu Ile Lys Ser Leu					
	755	760		765	
Leu Met Cys Phe Leu Tyr Ile Leu Lys Ser Met Ser Asp Asp Ala Leu					
	770	775		780	
Phe Thr Tyr Trp Asn Lys Ala Ser Thr Ser Glu Leu Met Asp Phe Phe					
785		790		795	800
Thr Ile Ser Glu Val Cys Leu His Gln Phe Gln Tyr Met Gly Lys Arg					
	805		810		815
Tyr Ile Ala Arg Thr Gly Met Met His Ala Arg Leu Gln Gln Leu Gly					
	820	825		830	
Ser Leu Asp Asn Ser Leu Thr Phe Asn His Ser Tyr Gly His Ser Asp					
	835	840		845	
Ala Asp Val Leu His Gln Ser Leu Leu Glu Ala Asn Ile Ala Thr Glu					
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Val Cys Leu Thr Ala Leu Asp Thr Leu Ser Leu Phe Thr Leu Ala Phe					
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Lys Asn Gln Leu Leu Ala Asp His Gly His Asn Pro Leu Met Lys Lys					
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Val Phe Asp Val Tyr Leu Cys Phe Leu Gln Lys His Gln Ser Glu Thr					
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Pro Ser Thr Phe Tyr Glu Gly Arg Ala Asp Met Cys Ala Ala Leu Cys					
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Tyr Glu Ile Leu Lys Cys Cys Asn Ser Lys Leu Ser Ser Ile Arg Thr					
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Glu Ala Ser Gln Leu Leu Tyr Phe Leu Met Arg Asn Asn Phe Asp Tyr					
	965	970		975	
Thr Gly Lys Lys Ser Phe Val Arg Thr His Leu Gln Val Ile Ile Ser					
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Val Ser Gln Leu Ile Ala Asp Val Val Gly Ile Gly Gly Thr Arg Phe					
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Gln Gln Ser Leu Ser Ile Ile Asn Asn Cys Ala Asn Ser Asp Arg Leu					
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Ile Lys His Thr Ser Phe Ser Ser Asp Val Lys Asp Leu Thr Lys Arg					
1025		1030		1035	1040
Ile Arg Thr Val Leu Met Ala Thr Ala Gln Met Lys Glu His Glu Asn					
	1045	1050		1055	
Asp Pro Glu Met Leu Val Asp Leu Gln Tyr Ser Leu Ala Lys Ser Tyr					
	1060	1065		1070	
Ala Ser Thr Pro Glu Leu Arg Lys Thr Trp Leu Asp Ser Met Ala Arg					
	1075	1080		1085	
Ile His Val Lys Asn Gly Asp Leu Ser Glu Ala Ala Met Cys Tyr Val					
	1090	1095		1100	
His Val Thr Ala Leu Val Ala Glu Tyr Leu Thr Arg Lys Glu Ala Val					
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Gln Trp Glu Pro Leu Leu Pro His Ser His Ser Ala Cys Leu Arg					

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1345										1350					1355				
Phe	Met	Phe	Glu	Met	Pro	Phe	Thr	Gln	Thr	Gly	Lys	Arg	Gln	Gly	Gly				
1365										1370					1375				
Val	Glu	Glu	Gln	Cys	Lys	Arg	Arg	Thr	Ile	Leu	Thr	Ala	Ile	His	Cys				
1380										1385					1390				
Phe	Pro	Tyr	Val	Lys	Lys	Arg	Ile	Pro	Val	Met	Tyr	Gln	His	His	Thr				
1395										1400					1405				
Asp	Leu	Asn	Pro	Ile	Glu	Val	Ala	Ile	Asp	Glu	Met	Ser	Lys	Lys	Val				
1410										1415					1420				
Ala	Glu	Leu	Arg	Gln	Leu	Cys	Ser	Ser	Ala	Glu	Val	Asp	Met	Ile	Lys				
1425										1430					1435				
Leu	Gln	Leu	Lys	Leu	Gln	Gly	Ser	Val	Ser	Val	Gln	Val	Asn	Ala	Gly				
1445										1450					1455				
Pro	Leu	Ala	Tyr	Ala	Arg	Ala	Phe	Leu	Asp	Asp	Thr	Asn	Thr	Lys	Arg				
1460										1465					1470				
Tyr	Pro	Asp	Asn	Lys	Val	Lys	Leu	Leu	Lys	Glu	Val	Phe	Arg	Gln	Phe				
1475										1480					1485				
Val	Glu	Ala	Cys	Gly	Gln	Ala	Leu	Ala	Val	Asn	Glu	Arg	Leu	Ile	Lys				
1490										1495					1500				
Glu	Asp	Gln	Leu	Glu	Tyr	Gln	Glu	Glu	Met	Lys	Ala	Asn	Tyr	Arg	Glu				
1505										1510					1515				
Met	Ala	Lys	Glu	Leu	Ser	Glu	Ile	Met	His	Gln	Glu	Ile	Cys	Pro	Leu				
1525										1530					1535				
Glu	Glu	Lys	Thr	Ser	Val	Leu	Pro	Asn	Ser	Leu	His	Ile	Phe	Asn	Ala				
1540										1545					1550				
Ile	Ser	Gly	Thr	Pro	Thr	Ser	Thr	Met	Val	His	Gly	Met							

1555
Ser Ser Val Val
1570

1560

1565

<210> 159
<211> 540
<212> DNA
<213> Homo sapiens

<400> 159
gccgggctctg ccatgtgctt actctgagcc acctaacctc ggctgcttc agtttactca
60
tccgctcatc tgcagaatgg gtgatgctgt cggctacttcg tggcatacag gaaagtgtccc
120
agcatggta gcctcagtga gaggtggcca gtggggagtg gtggccactg tacacctggc
180
acagcccaga gatgcatgtg cactctgtt gtgtgcttca accaaggggc gctctggcag
240
ggcttgggtg ggacttccca aagggcattg aaaagttccc agtcaatgag atccatggag
300
acctatggga gtgggggtga gcccagcct aagaggaccc ccagccctgc cctgtgcccc
360
aggacacacc aggcactgtc ccttctgcgc tcccagaca acctgtacc tccaggccac
420
cagttctcgt ccatgacaaa gaaaggagcc ttctaataa gtgcccgcga gaggtgtcac
480
gcttccctgc cccttcggg tggacctggg tttcaaagag aagctgccag tgcaacgcgt
540

<210> 160
<211> 110
<212> PRT
<213> Homo sapiens

<400> 160
Met Val Ser Leu Ser Glu Arg Trp Pro Val Gly Ser Gly Gly His Cys
1 5 10 15
Thr Pro Gly Thr Ala Gln Arg Cys Met Cys His Ser Val Val Cys Phe
20 25 30
Asn Gln Gly Ala Leu Trp Gln Gly Leu Gly Gly Thr Ser Gln Arg Ala
35 40 45
Trp Lys Ser Ser Gln Ser Met Arg Ser Met Glu Thr His Gly Ser Gly
50 55 60
Gly Gln Pro Gln Pro Lys Arg Thr Pro Ser Pro Ala Leu Cys Pro Arg
65 70 75 80
Thr His Gln Ala Leu Ser Leu Val Ala Phe Pro Asp Asn Leu Tyr Pro
85 90 95
Pro Gly His Gln Phe Ser Ser Met Thr Lys Lys Gly Ala Phe
100 105 110

<210> 161
<211> 351
<212> DNA
<213> Homo sapiens

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<400> 161
nnacgcgtac gtctttcggc cgaagaagga acgtgggcag gggcctcctt cgctggccgc
60
cgcgcttgcc tgcgacgcac gatgaagggc gacgacagca gcaagatcac ccacaagatc
120
gcccggggcga agcgcgaggg ccgcgtatgg tggagctttg agtacttccc gccgcgcacg
180
ccgcaggggca tgcagaattt gtatgaccgt atcgagcgca tgagtcagct gggccccgag
240
tttctgggaca ttacgtggaa tgccgggggc cggacgtcgg atatgacgac gcagctggtc
300
aagacggtgc atgcgtactt tgggtgctgag acgtgcatgc atctgacgtg c
351

```

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<210> 162
<211> 117
<212> PRT
<213> Homo sapiens

```

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<400> 162
Xaa Arg Val Arg Leu Ser Ala Glu Glu Gly Thr Trp Ala Gly Ala Ser
1 5 10 15
Phe Ala Gly Arg Arg Ala Trp Leu Ala Ala Thr Met Lys Gly Asp Asp
20 25 30
Ser Ser Lys Ile Thr His Lys Ile Ala Arg Ala Lys Arg Glu Gly Arg
35 40 45
Val Trp Trp Ser Phe Glu Tyr Phe Pro Pro Arg Thr Pro Gln Gly Met
50 55 60
Gln Asn Leu Tyr Asp Arg Ile Glu Arg Met Ser Gln Leu Gly Pro Glu
65 70 75 80
Phe Val Asp Ile Thr Trp Asn Ala Gly Gly Arg Thr Ser Asp Met Thr
85 90 95
Thr Gln Leu Val Lys Thr Val His Ala Tyr Phe Gly Val Glu Thr Cys
100 105 110
Met His Leu Thr Cys
115

```

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<210> 163
<211> 360
<212> DNA
<213> Homo sapiens

```

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<400> 163
gcggtctcca tcggcacctt gcagatgggc gaattcgcgtg aaaacgtcgc cggtggcgctc
60
gacacctaca ccttcgctca gcccatcggc gtatgcgacg gcatcactcc gttcaacttc
120
ccggcgatga ttccactgtg gatgttcccg atggcgattg cctgcggtaa cactttcgtg
180
ctcaaacctg ccgaacaaga ccctctgtcg acgatgctgc tggtagaact ggcgctggaa
240
gccggtgtgc cggccggcgt gctcaacgtg gtgcacggcg gcaaggatgt ggtggatgacg
300

```

ctgtgcaccc ataaagatat caaggcagtt tctttcgtcg gttcgaccgc cgttgggtacc
360

<210> 164

<211> 120

<212> PRT

<213> Homo sapiens

<400> 164

Ala	Cys	Ser	Ile	Gly	Thr	Leu	Gln	Met	Gly	Glu	Phe	Ala	Glu	Asn	Val
1				5					10				15		
Ala	Gly	Gly	Val	Asp	Thr	Tyr	Thr	Leu	Arg	Gln	Pro	Ile	Gly	Val	Cys
			20					25				30			
Ala	Gly	Ile	Thr	Pro	Phe	Asn	Phe	Pro	Ala	Met	Ile	Pro	Leu	Trp	Met
		35				40					45				
Phe	Pro	Met	Ala	Ile	Ala	Cys	Gly	Asn	Thr	Phe	Val	Leu	Lys	Pro	Ser
	50				55					60					
Glu	Gln	Asp	Pro	Leu	Ser	Thr	Met	Leu	Leu	Val	Glu	Leu	Ala	Leu	Glu
65					70				75				80		
Ala	Gly	Val	Pro	Ala	Gly	Val	Leu	Asn	Val	Val	His	Gly	Gly	Lys	Asp
			85					90				95			
Val	Val	Asp	Ala	Leu	Cys	Thr	His	Lys	Asp	Ile	Lys	Ala	Val	Ser	Phe
		100						105				110			
Val	Gly	Ser	Thr	Ala	Val	Gly	Thr								
		115				120									

<210> 165

<211> 728

<212> DNA

<213> Homo sapiens

<400> 165

gctagcagcc ttcacccctcc tagaggggca ggctcggcga caagggggcgg ggggtccccg
60
tcccagcgag ggacgcccgg ggctgggggt gccggctcgag cccgggggcaa cagcttcacc
120
aagtttgga accgcaacgt cttcatgaag gacaacagct cttcttcacg cacagactcc
180
cgctccccgt cctcctccag gtccccgacg cgccacttcc gcagaagtga ctccactca
240
gactccgaca gctcctactc aggggaatgag tgtcaccttg tgggccgcag gaaccgcgcc
300
cctaagggcc ggggcggtcg agggggccat atggatcggg gccgaggcag ggcgcagcgt
360
gggaagaggc acgatctggc gcccaaccaag cgagtcgaa agaagatggc ggcgctggag
420
tgtgaggacc cggagcgaga gctgaagaag cagaagcggg cagcccgctt ccagcacgga
480
cactcccgcc gcctgcgctc cgagcccttg gtgctgcaga tgagcagcct ggagagcagt
540
ggggctgacc ctgactggca ggagctgcag atcgtgggca cctgccctga catcaccaag
600
cactacctgc gcctcacctg tgcccccgac ccgtccaccg tgcgccctgt ggcattccct
660

gtggcagggtt ttgaaaaagt cgctgtgcat ggtcaagtgc cactggaaaag agaagcagga
 720
 ctacgcgt
 728

<210> 166
 <211> 242
 <212> PRT
 <213> Homo sapiens

<400> 166
 Ala Ser Ser Leu His Pro Pro Arg Gly Ala Gly Ser Ala Thr Arg Gly
 1 5 10 15
 Gly Gly Ala Pro Ser Gln Arg Gly Thr Pro Gly Ala Gly Gly Ala Gly
 20 25 30
 Arg Ala Arg Gly Asn Ser Phe Thr Lys Phe Gly Asn Arg Asn Val Phe
 35 40 45
 Met Lys Asp Asn Ser Ser Ser Ser Ser Thr Asp Ser Arg Ser Arg Ser
 50 55 60
 Ser Ser Arg Ser Pro Thr Arg His Phe Arg Arg Ser Asp Ser His Ser
 65 70 75 80
 Asp Ser Asp Ser Ser Tyr Ser Gly Asn Glu Cys His Pro Val Gly Arg
 85 90 95
 Arg Asn Pro Pro Pro Lys Gly Arg Gly Gly Arg Gly Ala His Met Asp
 100 105 110
 Arg Gly Arg Gly Arg Ala Gln Arg Gly Lys Arg His Asp Leu Ala Pro
 115 120 125
 Thr Lys Arg Ser Arg Lys Lys Met Ala Ala Leu Glu Cys Glu Asp Pro
 130 135 140
 Glu Arg Glu Leu Lys Lys Gln Lys Arg Ala Ala Arg Phe Gln His Gly
 145 150 155 160
 His Ser Arg Arg Leu Arg Leu Glu Pro Leu Val Leu Gln Met Ser Ser
 165 170 175
 Leu Glu Ser Ser Gly Ala Asp Pro Asp Trp Gln Glu Leu Gln Ile Val
 180 185 190
 Gly Thr Cys Pro Asp Ile Thr Lys His Tyr Leu Arg Leu Thr Cys Ala
 195 200 205
 Pro Asp Pro Ser Thr Val Arg Pro Val Ala Phe Pro Val Ala Gly Phe
 210 215 220
 Glu Lys Val Ala Val His Gly Gln Val Pro Leu Glu Arg Glu Ala Gly
 225 230 235 240
 Leu Arg

<210> 167
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 167
 nnacgcgtgg aaccagaact caggcccggtg tgaggagtct ggtttggaac acacgggggc
 60
 gcaacacaga attgtcaggt cctgtgccgt gaccacacac cctcggggcca tgccaggtgc
 120

tggtagagggg caggtggctc ccgccaggcg cctgctggcc tgaccgcact ccgtccacag
 180
 gtccctcatgg gcgtccctccg gctgggcttc gtgtccgcct acctctcaca gccactgtctc
 240
 gatggctttg ccatgggggc ctccgtgacc atcctgacct cgcagctcaa acacctgtgtg
 300
 ggctgtcgga tcccgcgga ccagggggccc ggcatgggtg tcctcacatg gctgagcctg
 360
 ctgctgcggc ccgggcaggc caacgtgtgc gacgtgggtc ccagcacggt gtgctctggc
 420
 gtgctgtctag ccgcgaagga gctctcagac cgctaccgac accgcctgag ggtgcccgtg
 480
 cccacggagc tgctggtcat cgtggtggcc
 510

<210> 168

<211> 128

<212> PRT

<213> Homo sapiens

<400> 168

Gly	Ala	Gly	Gly	Ser	Arg	Gln	Ala	Pro	Ala	Gly	Leu	Thr	Ala	Leu	Arg	1	5	10	15
Pro	Gln	Val	Leu	Met	Gly	Val	Leu	Arg	Leu	Gly	Phe	Val	Ser	Ala	Tyr	20	25	30	
Leu	Ser	Gln	Pro	Leu	Leu	Asp	Gly	Phe	Ala	Met	Gly	Ala	Ser	Val	Thr	35	40	45	
Ile	Leu	Thr	Ser	Gln	Leu	Lys	His	Leu	Leu	Gly	Val	Arg	Ile	Pro	Arg	50	55	60	
His	Gln	Gly	Pro	Gly	Met	Val	Val	Leu	Thr	Trp	Leu	Ser	Leu	Leu	Arg	65	70	75	80
Gly	Ala	Gly	Gln	Ala	Asn	Val	Cys	Asp	Val	Val	Thr	Ser	Thr	Val	Cys	85	90	95	
Leu	Ala	Val	Leu	Leu	Ala	Ala	Lys	Glu	Leu	Ser	Asp	Arg	Tyr	Arg	His	100	105	110	
Arg	Leu	Arg	Val	Pro	Leu	Pro	Thr	Glu	Leu	Leu	Val	Ile	Val	Val	Ala	115	120	125	

<210> 169

<211> 537

<212> DNA

<213> Homo sapiens

<400> 169

gaattccacc gcattgtcgtg tctggacgta tgtaggctgc ggtagtgtgc gaccgccggt
 60
 gccctaaagg agagcgggca tcggcggttc agtacgagag ggaagggtg gcggatactt
 120
 attgtcgggt cggtcatcgtc catccacacc gttcgatggg tcaatggact ggtcaagcgg
 180
 ggtcacgagg ttcacctggc atcagtcctc ccggcggggc gtcactccat tgatccccga
 240
 gttcggatcc acctggcccc acacggcggg aaggcaaaat acgtcgtcaa tgccggctgg
 300

ctgcgatcag tggcggctgg ggtgcaacct gacatcgta acgtccacta tgcgaccggt
 360
 tatggctctgc tcgctcgtct tgcctatatt gacgccccga cgctgctgtc ggtgtgggga
 420
 agtgacgttt acgattcccc ccggggcaaat ccctctatgc gtcacatggt ccgatccaa
 480
 ttggtctcag ctactcggat cgcacgcaca agccactgca tggcgcggtg cagcgct
 537

<210> 170
 <211> 164
 <212> PRT
 <213> Homo sapiens

<400> 170
 Cys Ala Thr Ala Gly Ala Leu Lys Glu Ser Gly His Arg Arg Cys Ser
 1 5 10 15
 Thr Arg Gly Glu Gly Val Arg Ile Leu Ile Val Gly Ala Ala Ser Ser
 20 25 30
 Ile His Thr Val Arg Trp Val Asn Gly Leu Val Lys Arg Gly His Glu
 35 40 45
 Val His Leu Ala Ser Val His Pro Ala Gly Arg His Ser Ile Asp Pro
 50 55 60
 Arg Val Arg Ile His Leu Ala Pro His Gly Gly Lys Ala Lys Tyr Val
 65 70 75 80
 Val Asn Ala Gly Trp Leu Arg Ser Val Ala Ala Gly Val Gln Pro Asp
 85 90 95
 Ile Val Asn Val His Tyr Ala Thr Gly Tyr Gly Leu Leu Ala Arg Leu
 100 105 110
 Ala His Ile Asp Ala Pro Thr Leu Leu Ser Val Trp Gly Ser Asp Val
 115 120 125
 Tyr Asp Ser Pro Arg Ala Asn Pro Leu Met Arg His Met Val Arg Ser
 130 135 140
 Asn Leu Val Ser Ala Thr Arg Ile Ala Ser Thr Ser His Cys Met Ala
 145 150 155 160
 Arg Val Thr Arg

<210> 171
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 171
 ctagacaagc tcgcgcgggt gggcttcgac actcttggtc tacagacctt cctaactcgg
 60
 ggggagaagg agtccccgcg atggacgatt cacaagggcg acaccgcccc tgaggctgct
 120
 ggcgtcatcc ataccgactt ccagaagggg ttcacaaagg cccaggtggt gtccttcggc
 180
 gaccttggtg aatttggcgg cgaaaaggag gccacggctg ctgggaagct gcggttgagg
 240
 ggcaaggagt acgttatgca ggacggtgac gtagtggaat tccgatttaa cgtgtagctc
 300

tggtttgata cttacttggc ttaaccgcat ctgagatccg tcatatcttt gccgtagcct
 360
 tattggtatg aataacatgc cgtagccaaa g
 391

<210> 172

<211> 98

<212> PRT

<213> Homo sapiens

<400> 172

Leu	Asp	Lys	Leu	Ala	Arg	Val	Gly	Phe	Asp	Thr	Leu	Gly	Leu	Gln	Thr
1				5					10					15	
Phe	Leu	Thr	Ala	Gly	Glu	Lys	Glu	Ser	Arg	Ala	Trp	Thr	Ile	His	Lys
			20					25					30		
Gly	Asp	Thr	Ala	Pro	Glu	Ala	Ala	Gly	Val	Ile	His	Thr	Asp	Phe	Gln
			35				40					45			
Lys	Gly	Phe	Ile	Lys	Ala	Gln	Val	Val	Ser	Phe	Gly	Asp	Leu	Val	Glu
						55					60				
Phe	Gly	Gly	Glu	Lys	Glu	Ala	Gln	Ala	Ala	Gly	Lys	Leu	Arg	Leu	Glu
65					70					75				80	
Gly	Lys	Glu	Tyr	Val	Met	Gln	Asp	Gly	Asp	Val	Val	Glu	Phe	Arg	Phe
				85					90					95	

Asn Val

<210> 173

<211> 309

<212> DNA

<213> Homo sapiens

<400> 173

ccatggagtg tcccttgtgc gagcattttg agagctatac caacacccat cctgcaggt
 60
 cccagagccg agccatttct caggagagca ggaagggagc aggccgaggg gtgctccccg
 120
 ccagccccgg aacccgaggt ctggggacgc agccgaccag ccctccttgt ctgggcctct
 180
 gtttcctctt cgacacaggg aagcagggag gggccgatca gcgacttagg cctgttggtc
 240
 gtgggtgggt ccctgcgtt tctgggaagc cacggaccct gggatgtacc tgggtttcat
 300
 tcgcagtga
 309

<210> 174

<211> 102

<212> PRT

<213> Homo sapiens

<400> 174

Met	Glu	Cys	Pro	Leu	Cys	Glu	His	Phe	Glu	Ser	Tyr	Thr	Asn	Thr	His
.1				5					10					15	
Pro	Cys	Arg	Ser	Gln	Ser	Arg	Ala	Ile	Ser	Gln	Glu	Ser	Arg	Lys	Gly

20					25					30					
Ala	Gly	Arg	Gly	Val	Leu	Pro	Ala	Ser	Pro	Gly	Thr	Arg	Gly	Leu	Gly
35					40					45					
Thr	Gln	Pro	Thr	Ser	Pro	Pro	Cys	Leu	Gly	Leu	Cys	Phe	Leu	Phe	Asp
50					55					60					
Thr	Gly	Lys	Gln	Gly	Gly	Ala	Asp	Gln	Arg	Leu	Arg	Pro	Val	Gly	Cys
65					70					75					
Gly	Gly	Val	Pro	Cys	Val	Ser	Gly	Lys	Pro	Arg	Thr	Leu	Gly	Cys	Thr
85					90					95					
Trp	Val	Ser	Phe	Ala	Val										
100															

<210> 175

<211> 8484

<212> DNA

<213> Homo sapiens

<400> 175

nnaactttttt	ttttttttt	catttatgct	atggagaaaac	cagcatggag	atgtcatggg
60	agagcatgca	caggccccgc	cctaggggagt	ggtgatgtgt	ttggggaggt
120	aggtccatcc	cacacgttg	ccagttggat	cctatggcag	gctggctgtg
180	tctctcttc	cttcctctc	cagataaagg	tctgcaggat	cttctgctta
240	gccaaaggact	ggtggatggg	tggtctggaag	cagcgcacat	gctccacagt
300	gtctccacgg	acttcatgta	ttgtttcagg	atggcaaaaa	cctcattgtt
360	tacttctga	tcgggtcggc	catcttcttc	aggggcacat	tcttaatatg
420	cggtcctgcc	tctgcacttt	tagcaggtgg	taacagaagt	cgaacaggct
480	tgtctggccca	gcaggacaat	gatggagcaa	ccagcccagt	tcaagcctac
540	tgctcagctg	tgaactcggt	ggttcccaca	gggatgcagt	acacgaactg
600	cacagccggt	ggaactccac	acactcatcg	acgtgcatag	cgccatttgt
660	ccccgccaga	tggggtcctg	caggtagctc	cgaatgcggg	tcaggatgac
720	gacaggccac	agcacagccg	ctccttggtc	aggaggctac	cctcgcgagc
780	tgctgagggg	tccccagccg	ctcgatcaga	gggaccagggt	ggagcggggg
840	tcagacggtt	tcattttggc	atcaagtctc	tccccctctt	tcacatggac
900	atgttcttga	aaggagccgc	gtgcagcagg	tcacacactt	cttctaaga
960	ctcgatgagg	aggcagaaga	ggatggcatt	gcccaacttc	ctcaggctct
1020	ctgtttttag	ctctgcgtac	tcaatgatgt	ccttcagctg	gtgggtggaag
1080				aactccagga	

tcctctgggga gccatactca tgcctgggga agcggcatat cttgggcacac acctctatca
1140
gtgtttttcac atactggaga atggttcctt ggagcaagct cttcacacac ttttagcagtt
1200
cctccatgac cacagcgatg ccctgataac ccaggagctc gcagatagtc ttgaaagtgt
1260
ggagggtccca cgaagtcccg gttagctgccg taaatgctgg agtaggccaa gttcaagcc
1320
ttggatccat gcagatactg aggtctgtgca ttaggtctgct tatctctttg aaattcctga
1380
gaaaatggta acactgtccg aacaaaccgg ttggtagagc cgtttagtaga gtagtggggc
1440
aggaagtcac agttgagctc ccagaagacg tgcagggtga tcctccccta gggcgctgac
1500
acgttgggtt tggcctcccg gaacatggcg tcgaagccgt ccagcgtcag gtaccggctc
1560
agcagcttgt gggctcatgcg gttgatttcc aacaggccat ccagctcaac tatggaggtc
1620
aaatcttcac tttcaaactc tccaatgccg agttctaggg acttatatcat ggctgtgtag
1680
acgcgctggg tgatcagacg attgaggtct attgatctgc cgaggagctg cacatgcctc
1740
tgcttcagca gcgtctcgta gcggttagac ggcgggaggt ggatcgtggc tcctgatctc
1800
ttgcatctcg atcgtaacgg tttatcaaga agcaaaactc ctgccataac cttataatag
1860
gcaaatatct ggtctgccag cttgttagaca aactgatcaa aacacagggt cacctcagct
1920
tctatctcat cgtacaggaa ctgcttttta aacttgggtc gagcatagta ggcgctgtca
1980
ttgtacagat ccaggggagta gagcacgtac tccatcatgg aagggtctct gggttccagg
2040
atatgggtccg ttagaatcca gggcatcgac atctcaatgg ggaactggat cctcctgcc
2100
atggtcagct ccagggaaga ctctcggaac cacagctgag aaaggtcaca gactgctgac
2160
agcgtttcac tgaaatttat caagttagtg tagaagaatg actctcgatg aaagtctctc
2220
atggcgagga caatgggtcc atccaggtcg ctctcaggg tctctcttga gccgcttttg
2280
tctgcaatga gtgattcaag catgggtctc accatgtaca gctgtgtgct ggatggcccc
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2460
tgtaggacgc tgatgaggac attcttcttc ttccgtaccg cctgcgcgag gggctcacgc
2520
agcgtcacct gggcgaaagtc ctgcaatgcc gcgtagatgg tgttctctgat ggcctgggtg
2580
aagacgctct ccatcctgcc catgagcacc tgcaggcctt tgatcatggc gatcacctca
2640
acgaaggcaa atttttctc actgggtgaa ttgtagcgtg tggctctctc atattctcc
2700

gcggtgccag gacagtcctt gttgcagaac ttgtctgtgg gatgaaccag cttccaagag
2760
tacacctcca tgacgtgggc gctccacttg gatagaagct gcagaccctg cagggtctagg
2820
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2880
acctcactgt tgcgtgtagc agcgagctcg gagatgaagc ggatgtggtc atcccggatc
2940
tgaacctctc gctcgcagat attgtactgg gggctgatgc tgctctgggt gcacgtccat
3000
cgagatttat tttcctcgta gtgggcctg gctctgatat atcttgccag tcttatttgc
3060
atgtcccaaa atagtggaa cacttgaggt tgcttgaagt acttgctgat ttgggataag
3120
tttattcttt tcttggcatc caacttatag atgttactga cactcccatc catcaggtag
3180
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<211> 1393

<212> PRT

<213> Homo sapiens

<400> 176

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Phe	Val	Ser	Lys	Leu	Ala	Trp	Tyr	Met	Met	Glu	Glu	Gly	Gly	Gly	Ser
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Met	His	Gly	Cys	Trp	Ser	Gly	Arg	Gly	Ser	Ser	Ser	Ser	Arg	Ser	Thr
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Ala	Thr	Ala	Gly	Pro	Arg	Ala	Gly	Ala	Gln	Asp	Ala	Leu	Pro	Arg	Ser

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Pro Leu Pro Asp Gln Gln Pro Cys Ile Glu Pro Pro Pro Ser Ser Ile
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Val Thr Gly Ile Ala Arg Tyr Ile Glu Gln Ala Thr Val His Ser Ser
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225              230              235              240
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260              265              270
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275              280              285
Arg Lys Asp Phe Val Ser Glu Ala Tyr Leu Ile Thr Leu Gly Lys Phe
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Val Lys Asn Asp His Ser Ala Tyr Lys Arg Ala Ala Gln Phe Leu Arg
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Glu Val Ile Ser Gly Tyr Glu Glu Leu Leu Ala Asp Ile Val Asn Leu
370              375              380
Cys Val Asp Tyr Tyr Glu Asn Arg Met Tyr Leu Thr Pro Ser Glu Lys
385              390              395              400
His Met Leu Leu Lys Val Met Gly Phe Gly Leu Tyr Leu Met Asp Gly
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Ser Val Ser Asn Ile Tyr Lys Leu Asp Ala Lys Lys Arg Ile Asn Leu
420              425              430
Ser Lys Ile Asp Lys Tyr Phe Lys Gln Leu Gln Val Val Pro Leu Phe
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Gly Asp Met Gln Ile Glu Leu Ala Arg Tyr Ile Lys Thr Ser Ala His
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465              470              475              480
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485              490              495
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Gln Asp Phe Ser Gln Val Thr Leu Arg Glu Pro Leu Arg Gln Ala Ile
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Ser Glu Asp Leu Thr Ser Ile Val Glu Leu Asp Gly Leu Leu Glu Ile
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 Val Lys Arg Leu Pro Lys Ala Val Ser Val Glu Gln Met Gln Lys Leu
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<211> 297

<212> DNA

<213> Homo sapiens

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<211> 99

<212> PRT

<213> Homo sapiens

<400> 182

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 35 40 45
 Leu Ser Arg Glu Leu Ser Leu Glu Glu Ile Gly Glu Ile Arg Gln Gln
 50 55 60
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<210> 183

<211> 351

<212> DNA

<213> Homo sapiens

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<210> 184

<211> 117

<212> PRT

<213> Homo sapiens

<400> 184

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 Val Ile Thr His Ile Pro Phe Asn Ile Val Ser Gln Ala Thr His Pro
 20 25 30
 Phe Leu Arg Thr Leu Asp Asp Val Lys Arg Ile Ser Leu Ala Thr Asp
 35 40 45
 Gly Leu Gly His Gln Val Leu Leu Lys Gly Tyr Gln Ala Glu Gly His
 50 55 60
 Asp Tyr Ala His Pro Asp Tyr Gly Gly Asn Val Ser His Arg Ala Gly
 65 70 75 80
 Gly Met Lys Asp Leu Glu Lys Leu Thr Glu Ser Gly Arg Gln Trp Asn

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      85              90              95
Thr Asp Phe Gly Ile His Val Asn Leu Val Glu Ser Tyr Pro Glu Ala
      100              105              110
Asn His Phe Gly Asp
      115

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<210> 185
 <211> 396
 <212> DNA
 <213> Homo sapiens

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<400> 185
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120
gggccacggt ataagcgtag caaattagaa agaagagcaa acacagatgt cctctggtgt
180
gtcatgcttc tggtcataat gtgcttaact ggcgcagtag gtcatggaat ctggctgagc
240
aggtatgaaa agatgcattt tttcaatggt cccgagcctg atggacatat catatcacca
300
ctggtggcag gattttatat gttttggacc gtgatcattt tgttacaggt cttgattcct
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396

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<210> 186
 <211> 132
 <212> PRT
 <213> Homo sapiens

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<400> 186
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Arg Asn Thr Glu Ala Val Val Gly Ile Val Val Tyr Ala Gly His Glu
20     25     30
Thr Lys Ala Met Leu Asn Asn Ser Gly Pro Arg Tyr Lys Arg Ser Lys
35     40     45
Leu Glu Arg Arg Ala Asn Thr Asp Val Leu Trp Cys Val Met Leu Leu
50     55     60
Val Ile Met Cys Leu Thr Gly Ala Val Gly His Gly Ile Trp Leu Ser
65     70     75     80
Arg Tyr Glu Lys Met His Phe Phe Asn Val Pro Glu Pro Asp Gly His
85     90     95
Ile Ile Ser Pro Leu Leu Ala Gly Phe Tyr Met Phe Trp Thr Val Ile
100    105    110
Ile Leu Leu Gln Val Leu Ile Pro Ile Ser Leu Tyr Val Ser Ile Glu
115    120    125
Ile Val Lys Leu
130

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<210> 187
 <211> 423

<212> DNA

<213> Homo sapiens

<400> 187

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 gatgagcatc gtcgtttgct tggcacggtc ggcgatcaag aggtcatcga ggtgctcgc
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 240
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 300
 gtcgacgagg acttccacct catgggtgct atctctcggg tgacctgct cgacgcgatg
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 423

<210> 188

<211> 141

<212> PRT

<213> Homo sapiens

<400> 188

Arg	Val	Leu	Thr	Ala	Ser	Ala	Val	Met	Arg	Pro	Thr	Glu	Ala	Val	Val
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Ser	Arg	Ser	Ala	Glu	Pro	Arg	Arg	Val	Gln	Arg	Ile	Leu	Asp	Gln	Arg
			20					25				30			
Glu	Trp	Ala	Gly	Val	Phe	Val	Val	Asp	Glu	His	Arg	Arg	Leu	Leu	Gly
		35				40					45				
Thr	Val	Gly	Asp	Gln	Glu	Val	Ile	Glu	Ala	Ala	Arg	Arg	Gly	Asp	Arg
	50				55				60						
Ser	Ile	Ala	Asp	Ala	Val	Glu	Thr	Asn	Gly	Ile	Leu	Thr	Ala	Arg	Thr
65				70				75					80		
Asp	Thr	Pro	Leu	Ser	Glu	Leu	Phe	Ala	Pro	Thr	Ser	Asn	Ala	Arg	Val
			85					90					95		
Pro	Leu	Ala	Val	Val	Asp	Glu	Asp	Phe	His	Leu	Met	Gly	Val	Ile	Ser
			100				105					110			
Arg	Val	Thr	Leu	Leu	Asp	Ala	Met	Ser	Arg	Ala	Arg	Asp	Glu	Ala	Gly
		115				120						125			
Glu	Gly	Ser	Val	Met	Ser	Leu	Glu	Asn	Thr	Gly	Lys	Leu			
	130					135					140				

<210> 189

<211> 429

<212> DNA

<213> Homo sapiens

<400> 189

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 120
 atttcgccga tgcggctcat cgcacgggta agaagtttcg tccagataac ccaggacaga
 180
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 240
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 300
 gaagggagcg catcccnagc ttcgcctagc cccagagcta acccagcgac cagtggacca
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 420
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 429

<210> 190

<211> 123

<212> PRT

<213> Homo sapiens

<400> 190

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Glu	Ala	Xaa	Asp	Ala	Leu	Pro	Ser	Ala	Met	Lys	Val	Leu	Ser	Trp	Thr
			20					25					30		
Pro	Leu	Gly	Ala	Pro	Phe	Ala	Val	Ala	Ser	Ala	Val	Tyr	Met	Gly	His
		35				40					45				
Trp	Gly	Lys	Ala	Leu	Leu	Phe	Leu	Val	Leu	Ser	Leu	Ile	Tyr	Leu	Ala
	50				55					60					
Leu	Ser	Trp	Val	Ile	Trp	Thr	Lys	Leu	Leu	Asn	Arg	Ala	Met	Ser	Arg
65				70				75						80	
Ile	Gly	Glu	Ile	Gly	Thr	Thr	Ala	Ser	Lys	Gln	Val	Glu	Ala	Gly	
			85					90					95		
Asn	Ala	Gly	Ile	Phe	Lys	His	Phe	Thr	Ala	Ser	Pro	Arg	Gly	Ala	Ile
		100					105						110		
Ala	Ala	Arg	Thr	Val	His	Met	Leu	Val	Asn	His					
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<210> 191

<211> 4845

<212> DNA

<213> Homo sapiens

<400> 191

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 120
 tcggggggcgg cttcccgagc acggtatctt ctgtatgacg tcaaccccc ggaaggcttc
 180
 aacctgcgca gggatgtcta tatccgaatc gcctctctcc tgaagactct gctgaagacg
 240
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 300

atccaccagg tccggattcc ctggctctgag ttttttgate ttccaagtct caataaaaaac
360
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420
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<210> 192

<211> 428

<212> PRT

<213> Homo sapiens

<400> 192

Pro Pro Gly Ala Met Ala Thr Leu Ser Phe Val Phe Leu Leu Leu Gly
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 Ala Val Ser Trp Pro Pro Ala Ser Ala Ser Gly Gln Glu Phe Trp Pro
 20 25 30
 Gly Gln Ser Ala Ala Asp Ile Leu Ser Gly Ala Ala Ser Arg Arg Arg

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      35              40              45
Tyr Leu Leu Tyr Asp Val Asn Pro Pro Glu Gly Phe Asn Leu Arg Arg
  50              55              60
Asp Val Tyr Ile Arg Ile Ala Ser Leu Leu Lys Thr Leu Leu Lys Thr
  65              70              75              80
Glu Glu Trp Val Leu Val Leu Pro Pro Trp Gly Arg Leu Tyr His Trp
      85              90              95
Gln Ser Pro Asp Ile His Gln Val Arg Ile Pro Trp Ser Glu Phe Phe
      100              105              110
Asp Leu Pro Ser Leu Asn Lys Asn Ile Pro Val Ile Glu Tyr Glu Gln
      115              120              125
Phe Ile Ala Glu Ser Gly Gly Pro Phe Ile Asp Gln Val Tyr Val Leu
      130              135              140
Gln Ser Tyr Ala Glu Gly Trp Lys Glu Gly Thr Trp Glu Glu Lys Val
      145              150              155              160
Asp Glu Arg Pro Cys Ile Asp Gln Leu Leu Tyr Ser Gln Asp Lys His
      165              170              175
Glu Tyr Tyr Arg Gly Trp Phe Trp Gly Tyr Glu Glu Thr Arg Gly Leu
      180              185              190
Asn Val Ser Cys Leu Ser Val Gln Gly Ser Ala Ser Ile Val Ala Pro
      195              200              205
Leu Leu Leu Arg Asn Thr Ser Ala Arg Ser Val Met Leu Asp Arg Ala
      210              215              220
Glu Asn Leu Leu His Asp His Tyr Gly Gly Lys Glu Tyr Trp Asp Thr
      225              230              235              240
Arg Arg Ser Met Val Phe Ala Arg His Leu Arg Glu Val Gly Asp Glu
      245              250              255
Phe Arg Ser Arg His Leu Asn Ser Thr Asp Asp Ala Asp Arg Ile Pro
      260              265              270
Phe Gln Glu Asp Trp Met Lys Met Lys Val Lys Leu Gly Ser Ala Leu
      275              280              285
Gly Gly Pro Tyr Leu Gly Val His Leu Arg Arg Lys Asp Phe Ile Trp
      290              295              300
Gly His Arg Gln Asp Val Pro Ser Leu Glu Gly Ala Val Arg Lys Ile
      305              310              315              320
Arg Ser Leu Met Lys Thr His Arg Leu Asp Lys Val Phe Val Ala Thr
      325              330              335
Asp Ala Val Arg Lys Glu Tyr Glu Glu Leu Lys Lys Leu Leu Pro Glu
      340              345              350
Met Val Arg Phe Glu Pro Thr Trp Glu Glu Leu Glu Leu Tyr Lys Asp
      355              360              365
Gly Gly Val Ala Ile Ile Asp Gln Trp Ile Cys Ala His Ala Arg Cys
      370              375              380
Leu Pro Thr Ser Leu Ser Ala Glu Ser Gly Ser Gly Gly Phe Gln Arg
      385              390              395              400
Phe Phe Cys Pro Lys Tyr Ser Val Ser Glu Gln Met Val Ala Cys Val
      405              410              415
His Ser Gly His Phe His Thr Val Cys Leu Leu Val
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<210> 193

<211> 350

<212> DNA

<213> Homo sapiens

<400> 193
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 120
 cgtgccagca tcagccccga ggaggtcaag ggcgagacca tggtgatgtt gggcacggcg
 180
 ccctgggttc cccggggccg cgggtgggggt ttggcccgga tttggcgctt tctccagcg
 240
 ccgttaaggg catacgccgc agtttcgagg gctcgtcgtc ggagaccatc aagcacatcg
 300
 tggcttcggg catggcgtga cgggtgtgcc gcagctgtcc gtgccgcgcg
 350

<210> 194
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 194
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 20 25 30
 Arg Ala Ser His Pro Leu Ala Asp Arg Ala Ser Ile Ser Pro Glu Glu
 35 40 45
 Val Lys Gly Glu Thr Met Leu Met Leu Gly Thr Gly Pro Trp Phe Pro
 50 55 60
 Arg Ala Arg Gly Gly Gly Leu Ala Arg Ile Trp Arg Val Ser Pro Ala
 65 70 75 80
 Pro Leu Arg Ala Tyr Ala Ala Val Ser Arg Ala Arg Arg Trp Arg Pro
 85 90 95
 Ser Ser Thr Ser Trp Leu Arg Ala Trp Arg Asp Gly Gly Ala Ala Ala
 100 105 110
 Val Arg Ala Ala
 115

<210> 195
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 195
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 ccagaacttg gcgacgattt ggccgctc ctgctcgatt ctcacgggt tgctgtcatc
 180
 agcgagggat cgaactggct tgctcgcta cccgtgatcg taggtcgcaa cacggaacag
 240
 tttcgcagca taccagacct tgcccgac cggatcgaca aactgcacca gttgagccat
 300

cgcgaaatag cagcaaatcg cgagctcctg cgtgcccgcg ctgcgtcggg gcagggtcgg
 360
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<210> 196

<211> 165

<212> PRT

<213> Homo sapiens

<400> 196

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Glu	Trp	Ala	Val	Glu	Met	Val	Arg	Phe	Asp	Glu	Ser	Glu	Thr	Leu	Asp
		20					25					30			
Arg	Leu	Ala	Ser	Gly	Val	Leu	Glu	Pro	Glu	Leu	Gly	Asp	Asp	Leu	Ala
	35					40					45				
Ala	Val	Leu	Leu	Asp	Ser	His	Arg	Val	Ala	Val	Ile	Ser	Glu	Gly	Ser
	50				55					60					
Asn	Trp	Leu	Ala	Ser	Leu	Pro	Val	Ile	Val	Gly	Arg	Asn	Thr	Glu	Gln
65				70					75				80		
Phe	Arg	Ser	Ile	Pro	Asp	Leu	Ala	Arg	Asp	Arg	Ile	Asp	Lys	Leu	His
			85					90				95			
Gln	Leu	Ser	His	Arg	Glu	Ile	Ala	Arg	Asn	Arg	Glu	Leu	Leu	Arg	Ala
		100					105					110			
Arg	Ala	Ala	Ser	Gly	Gln	Val	Arg	His	Cys	His	Gly	Asp	Ala	His	Leu
	115					120					125				
Gly	Asn	Ile	Val	Met	Ile	Asp	Gly	Lys	Pro	Val	Leu	Phe	Asp	Ala	Ile
	130					135					140				
Glu	Phe	Asp	Pro	Asp	Ile	Ala	Thr	Thr	Asp	Val	Leu	Tyr	Asp	Phe	Ala
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Phe	Pro	Leu	Met	Asp											
					165										

<210> 197

<211> 402

<212> DNA

<213> Homo sapiens

<400> 197

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 120
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 180
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 300

cgtgcgggcg atatcgctgc agcaatcggc ttaaaagatg taactacggg tgaaccatta
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 402

<210> 198

<211> 134

<212> PRT

<213> Homo sapiens

<400> 198

Gln	Ala	Met	Leu	Asp	Ala	Val	Val	Glu	Tyr	Leu	Pro	Ala	Pro	Thr	Asp
1			5					10				15			
Ile	Pro	Ala	Ile	Lys	Gly	Ile	Asn	Pro	Asp	Glu	Thr	Glu	Gly	Glu	Arg
		20					25					30			
His	Ala	Ser	Asp	Asp	Glu	Pro	Phe	Ser	Ser	Leu	Ala	Phe	Lys	Ile	Ala
		35					40				45				
Thr	Asp	Pro	Phe	Val	Gly	Asn	Leu	Thr	Phe	Phe	Arg	Val	Tyr	Ser	Gly
	50				55				60						
Val	Ile	Asn	Ser	Gly	Asp	Thr	Val	Leu	Asn	Ser	Val	Arg	Gln	Lys	Arg
65				70				75					80		
Glu	Arg	Phe	Gly	Arg	Ile	Val	Gln	Met	His	Ala	Asn	Lys	Arg	Glu	Glu
			85				90						95		
Ile	Lys	Glu	Val	Arg	Ala	Gly	Asp	Ile	Ala	Ala	Ala	Ile	Gly	Leu	Lys
			100				105						110		
Asp	Val	Thr	Thr	Gly	Glu	Pro	Leu	Cys	Ala	Val	Asp	Ala	Pro	Ile	Ile
		115				120					125				
Leu	Glu	Arg	Met	Glu	Phe										
			130												

<210> 199

<211> 507

<212> DNA

<213> Homo sapiens

<400> 199

acgcgtgaag tcgtgcatag atcgggtgtga catagagaag cctccgaccc aagctgcgta
 60
 tatcgacaca agaccaagcg accctggacg ttctagacag aactctgcta cgaggcctga
 120
 caatagttaa atccccgaga acccagctat ggaaggggtt ccagatgctc gaaggcctgt
 180
 cataccagag gttagggttaa actgtatgga gactttcgag gtgaaagttg actcgccggt
 240
 aaagcctgct cctaaagagg atttagatct gatagatcta tcctcagatt caacctcggg
 300
 gcctgaaaaa cactctatac tctcaacctc cgacagcgac tctcttgat ttgagcctct
 360
 tccctctctc agaatagtcg agagtgcga agaagaggag acgatgaacc aaggcgatga
 420
 cggccctctc ggtaaaaatg ctgcctcttc tccctccatc cccagccatc cctccgtctc
 480
 cagcctgagc acagctccgc ttgtaca
 507

<210> 200

<211> 153

<212> PRT

<213> Homo sapiens

<400> 200

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Met Glu Gly  Glu Glu Ala Ala Phe Leu Pro Glu Gly Pro Ser Ser Pro
 1              5              10              15
Trp Phe Ile Val Ser Ser Ser Ser Ser Leu Ser Thr Ile Leu Arg Glu
              20              25              30
Gly Arg Gly Ser Asn Thr Arg Glu Ser Leu Ser Glu Val Glu Ser Ile
 35              40              45
Glu Cys Phe Ser Gly Pro Glu Val Glu Ser Glu Asp Arg Ser Ile Arg
 50              55              60
Ser Lys Ser Ser Leu Gly Ala Gly Phe Thr Gly Glu Ser Thr Phe Thr
 65              70              75              80
Ser Lys Val Ser Ile Gln Phe Asn Leu Thr Ser Gly Met Thr Gly Leu
 85              90              95
Arg Ala Ser Gly Asn Pro Ser Ile Ala Gly Phe Ser Gly Ile Ser Leu
 100             105             110
Leu Ser Gly Leu Val Ala Glu Phe Cys Leu Glu Arg Pro Gly Ser Leu
 115             120             125
Gly Leu Cys Ala Ile Tyr Ala Ala Trp Val Gly Gly Phe Ser Met Ser
 130             135             140
His Arg Ser Met His Asp Phe Thr Arg
145             150

```

<210> 201

<211> 527

<212> DNA

<213> Homo sapiens

<400> 201

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gatgtggcta ttatccctgt ttcccagggtg agaaacagggt tcagtgatag agctgggcatg
60
tgtgcctcga ggctcaccag ccagtcacct cctcaccaag gatgatgttc tccgtggtaga
120
gctggctcctt ggtctcctgg aactcgtggc gcacctgggc cagctgogcc tcgaaggcat
180
cctctctcat ctctttggct agctgcaagt tctggagctg ctggttgagg tctgtgatct
240
catccacctg ctggttgagc gtgcgcttga ggaaggccac aatctccttc ttgttattgg
300
ccagctgtct aaactcctgg cggaacatct tctcctgcac agccagctca tcccacttcc
360
gctggtagcc ggctagccgg tccctccagg ctccgatctg gatgtggtag aactccttca
420
tctccttgcc cagaggcgcc tccacggcca ccaccggctc cttcttgccc cttttcttct
480
tgaactcaag ctcttgctc gccttgcctc cactcttttt gggaggc
527

```

<210> 202

<211> 70
 <212> PRT
 <213> Homo sapiens

<400> 202
 Gly Arg Pro Gln Ser Pro Ser Cys Tyr Trp Pro Ala Ala Gln Thr Pro
 1 5 10 15
 Gly Gly Thr Ser Ser Pro Ala Gln Pro Ala His Pro Thr Ser Ala Gly
 20 25 30
 Thr Gly Leu Ala Gly Pro Pro Gly Leu Gly Ser Gly Cys Gly Arg Thr
 35 40 45
 Pro Ser Ser Pro Trp Pro Glu Ala Ala Pro Arg Pro Pro Ala Pro
 50 55 60
 Ser Cys Pro Leu Ser Ser
 65 70

<210> 203
 <211> 304
 <212> DNA
 <213> Homo sapiens

<400> 203
 ngtgcaccgg tggtcacgga caacgcccgc tacgtgggtc acacctcggg atccaccggc
 60
 cgacccaagg gagttgtcgt caccacaccc ggactcgaca gcttcgcact cgaccagcag
 120
 cgtcgattcc acgcagatca ccactctoga accctgcact tcgccacccc cagcttcgac
 180
 ggagccggtc tcgagtacct gcaggcattc ggtgtcggag ccaccatggt gatcgtcccg
 240
 accgacatct acggcggcgc cgaactggca agtctcatcc gccgcgaaca cgtcactcac
 300
 gcgt
 304

<210> 204
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 204
 Xaa Ala Pro Val Val Met Asp Asn Ala Ala Tyr Val Val Tyr Thr Ser
 1 5 10 15
 Gly Ser Thr Gly Arg Pro Lys Gly Val Val Val Thr His Thr Gly Leu
 20 25 30
 Asp Ser Phe Ala Leu Asp Gln Gln Arg Arg Phe His Ala Asp His His
 35 40 45
 Ser Arg Thr Leu His Phe Ala Thr Pro Ser Phe Asp Gly Ala Val Phe
 50 55 60
 Glu Tyr Leu Gln Ala Phe Gly Val Gly Ala Thr Met Val Ile Val Pro
 65 70 75 80
 Thr Asp Ile Tyr Gly Gly Ala Glu Leu Ala Ser Leu Ile Arg Arg Glu
 85 90 95
 His Val Thr His Ala

100

<210> 205

<211> 356

<212> DNA

<213> Homo sapiens

<400> 205

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nngaattcag caatgataac tggctcaatt gaaggtaaga caacaattga gggaattaat
60
gcacaattaa atacagtgtt aactttatct tcaccacaat caaaagataa agatttaattc
120
atgccagatc aacaagaaga aatagatatt ctgattgcaa ccgactgtat ttcagaagga
180
cagaacttac aagattgtga ttacttaata aactatgaca ttcattggaa tccagttcgt
240
atcattcaaa gatttggacg gattgatcga attgggtcga agaataaatg tgtacaatta
300
gttaactttt ggccagatat tacattagat gaatatattg atctaaaggg acgcgt
356

```

<210> 206

<211> 118

<212> PRT

<213> Homo sapiens

<400> 206

```

Xaa Asn Ser Ala Met Ile Thr Gly Ser Ile Glu Gly Lys Thr Thr Ile
1         5         10        15
Glu Gly Ile Asn Ala Gln Leu Asn Thr Val Leu Thr Leu Phe Ser Pro
20        25        30
Gln Ser Lys Asp Lys Asp Leu Ile Met Pro Asp Gln Gln Glu Glu Ile
35        40        45
Asp Ile Leu Ile Ala Thr Asp Cys Ile Ser Glu Gly Gln Asn Leu Gln
50        55        60
Asp Cys Asp Tyr Leu Ile Asn Tyr Asp Ile His Trp Asn Pro Val Arg
65        70        75        80
Ile Ile Gln Arg Phe Gly Arg Ile Asp Arg Ile Gly Ser Lys Asn Lys
85        90        95
Cys Val Gln Leu Val Asn Phe Trp Pro Asp Ile Thr Leu Asp Glu Tyr
100       105       110
Ile Asp Leu Lys Gly Arg
115

```

<210> 207

<211> 324

<212> DNA

<213> Homo sapiens

<400> 207

```

acgcgtgcac tgtgtgtatg catggtaacy tacacgtgtg cactgtgtgt ggtgtgcatt
60
catgtgtgtg gcacgtgtng cactgtgtgt ggatgcatgg taatgtgcac gtgtgcactg
120

```

tgtgtggtgt gtatgcatgg tgtgtgcacg tgtgcactgt gtgtgtgtgt atgcatgtgt
 180
 gtgcacatgt gcaactgtgtg gtgtgtatgc atgggtgtgtg cactgtgtgca ctgtgtatgc
 240
 atgngtgtgt gcatgtgtgc actgtgtatg catagtgtgc acgtgtgcac tgtgtggtgt
 300
 gtatgcatgg taatgtgcac gtgt
 324

<210> 208

<211> 108

<212> PRT

<213> Homo sapiens

<400> 208

Thr Arg Ala Leu Cys Val Cys Met Val Thr Tyr Thr Cys Ala Leu Cys
 1 5 10 15
 Val Val Cys Met His Gly Val Cys Thr Cys Xaa Thr Val Cys Gly Cys
 20 25 30
 Met Val Met Cys Thr Cys Ala Leu Cys Val Val Cys Met His Gly Val
 35 40 45
 Cys Thr Cys Ala Leu Cys Val Cys Val Cys Met Cys Val His Met Cys
 50 55 60
 Thr Val Trp Cys Val Cys Met Val Cys Ala Arg Val His Cys Val Cys
 65 70 75 80
 Met Xaa Val Cys Met Cys Ala Leu Cys Met His Ser Val His Val Cys
 85 90 95
 Thr Val Trp Cys Val Cys Met Val Met Cys Thr Cys
 100 105

<210> 209

<211> 168

<212> DNA

<213> Homo sapiens

<400> 209

nnctccagag gttatgaggt tggaagcccg gtttttttca ggtgcagaaa aggctaccat
 60
 attcaaggtt ccacgactcg cacctgcctt gccaatttta catggagtgg gatacagacc
 120
 gaatgtatac ctcatgcctg cagacagcca gaaaccccg cacaacgag
 168

<210> 210

<211> 56

<212> PRT

<213> Homo sapiens

<400> 210

Xaa Ser Arg Gly Tyr Glu Val Gly Ser Pro Val Phe Phe Arg Cys Arg
 1 5 10 15
 Lys Gly Tyr His Ile Gln Gly Ser Thr Thr Arg Thr Cys Leu Ala Asn
 20 25 30
 Leu Thr Trp Ser Gly Ile Gln Thr Glu Cys Ile Pro His Ala Cys Arg

35 40
Gln Pro Glu Thr Pro Ala His Ala
50 55

45

<210> 211
<211> 354
<212> DNA
<213> Homo sapiens

<400> 211
tacatgggct ttgacacagt ggtggctgaa gctgcactaa ggggtgttgg aggcaatgtc
60
cagctggcag ctcagaccct tgcacacccat ggaggaagcc tcccaccga cctgcagttc
120
tcaggagagg actcctcccc cacaccgtcc acatccccat ctgactctgc agggacctct
180
agtgcctcga cagatgaaga catggagacg gaggctgtca acgaaatcct ggaggacatt
240
ccggagcagc aggaggacta cctggactcc acgctggagg atgaagaagt cattattgtc
300
gaatacttgt cctgcgttga aagtataagt tctgccngca aagaacaact gatc
354

<210> 212
<211> 118
<212> PRT
<213> Homo sapiens

<400> 212
Tyr Met Gly Phe Asp Thr Val Val Ala Glu Ala Ala Leu Arg Val Phe
1 5 10 15
Gly Gly Asn Val Gln Leu Ala Ala Gln Thr Leu Ala His His Gly Gly
20 25 30
Ser Leu Pro Pro Asp Leu Gln Phe Ser Gly Glu Asp Ser Ser Pro Thr
35 40 45
Pro Ser Thr Ser Pro Ser Asp Ser Ala Gly Thr Ser Ser Ala Ser Thr
50 55 60
Asp Glu Asp Met Glu Thr Glu Ala Val Asn Glu Ile Leu Glu Asp Ile
65 70 75 80
Pro Glu His Glu Glu Asp Tyr Leu Asp Ser Thr Leu Glu Asp Glu Glu
85 90 95
Val Ile Ile Ala Glu Tyr Leu Ser Cys Val Glu Ser Ile Ser Ser Ala
100 105 110
Xaa Lys Glu Gln Leu Ile
115

<210> 213
<211> 669
<212> DNA
<213> Homo sapiens

<400> 213
attgcccaat ctcagagtgt ccaggaaagc ctggagagcc tgggtgcagtc tattggggaa
60

gttgaacaaa acctggaagg gaaacagggtg tcatactct catcaggagt catccaggaa
 120
 gccttagcca caaatatgaa attgaagcag gacattgtct ggcaaaagag cagcttggag
 180
 gccacccgtg agatggtgac ccgattcatg gagacagcag acagtactac agcagcagtg
 240
 ctgcagggca aactggcgaga ggtgagccag cggttcgaa acgtctgtct acagcagcaa
 300
 gaaaaggaga gctccctaaa gaagcttcta cccagggcag agatgtttga acacctctct
 360
 ggtaagctgc agcagttcat ggaaaacaaa agtcggatgc tggcctctgg aaatcagcca
 420
 gatcaagata ttacacattt cttccaacag atccaggagc tcaatttggg aatggaagac
 480
 caacaggaga acctagatac tcttgagcac ctggtcactg aactgagctc ttgtggcttt
 540
 gcgctggact tgtgccagca tcaggacagg gtacagaatc taagaaaaga cttcacagag
 600
 ctacagaaga cagttaaaga gagagagaaa gatgcacatc cttgccagga acagttggat
 660
 gaattccgg
 669

<210> 214

<211> 223

<212> PRT

<213> Homo sapiens

<400> 214

Ile Ala Gln Ser Gln Ser Val Gln Glu Ser Leu Glu Ser Leu Leu Gln
 1 5 10 15
 Ser Ile Gly Glu Val Glu Gln Asn Leu Glu Gly Lys Gln Val Ser Ser
 20 25 30
 Leu Ser Ser Gly Val Ile Gln Glu Ala Leu Ala Thr Asn Met Lys Leu
 35 40 45
 Lys Gln Asp Ile Ala Arg Gln Lys Ser Ser Leu Glu Ala Thr Arg Glu
 50 55 60
 Met Val Thr Arg Phe Met Glu Thr Ala Asp Ser Thr Thr Ala Ala Val
 65 70 75 80
 Leu Gln Gly Lys Leu Ala Glu Val Ser Gln Arg Phe Glu Gln Leu Cys
 85 90 95
 Leu Gln Gln Gln Glu Lys Glu Ser Ser Leu Lys Lys Leu Leu Pro Gln
 100 105 110
 Ala Glu Met Phe Glu His Leu Ser Gly Lys Leu Gln Gln Phe Met Glu
 115 120 125
 Asn Lys Ser Arg Met Leu Ala Ser Gly Asn Gln Pro Asp Gln Asp Ile
 130 135 140
 Thr His Phe Phe Gln Gln Ile Gln Glu Leu Asn Leu Glu Met Glu Asp
 145 150 155 160
 Gln Gln Glu Asn Leu Asp Thr Leu Glu His Leu Val Thr Glu Leu Ser
 165 170 175
 Ser Cys Gly Phe Ala Leu Asp Leu Cys Gln His Gln Asp Arg Val Gln
 180 185 190
 Asn Leu Arg Lys Asp Phe Thr Glu Leu Gln Lys Thr Val Lys Glu Arg

```

      195                200                205
Glu Lys Asp Ala Ser Ser Cys Gln Glu Gln Leu Asp Glu Phe Arg
      210                215                220

<210> 215
<211> 814
<212> DNA
<213> Homo sapiens

<400> 215
aaatttcgta cccgctccg caccgtacga gcccttgacg atgtgagcct ggctattaag
60
agaggttcca tctcagccgt tatcggggcac tccggagccg gcaaattccac cctgggttcgc
120
ctcatcaacg gattagagac tcccacgcgt ggccgcgtct tggtagacgg caccgacgtc
180
tcgcagctct cggacaaagc gatgcgcccg ctacgcgcag acatcgggat gatcttccaa
240
cagttcaacc tattcggctc aaggaccatc tacgacaacg ttgcttatcc actcaagctg
300
gtctattgga agaagcaga cgagaagaag cgcgtcaccg aattgtctgag ctctcgtcggg
360
ttgacgagca aagcctggga ccatccagac cagctctcgg gcggacagaa acagcggggtt
420
ggatattgcc gagcgctagc aactaaacca tcgattttgt tggctgacga gtccacctcg
480
gcgcgtggatc cagaaacgac agctgatgtc ctatccctcg tcaagcgggt caatgcggaa
540
ctaggggtga cggctcgtcgt catcaccacg gagatggagg tcgtccgctc gattgcccag
600
cagggtctcg tactagcagc tggccatctc gtcgagttcg gaagcgcgcc ccagggtcttc
660
gctcatccac agtcagagac caccacgcgt ttcctggcga cgattatcgg ccagcaccgg
720
agtggggagg aacaggcacg gttgcagtcg gaaaaccacg atgcacgact cgtcgcgctc
780
agttcgggtg ccagtcactc gttcgggtgac gcgt
814

<210> 216
<211> 271
<212> PRT
<213> Homo sapiens

<400> 216
Lys Phe Arg Thr Arg Ser Gly Thr Val Arg Ala Leu Asp Asp Val Ser
1 5 10 15
Leu Ala Ile Lys Arg Gly Ser Ile Ser Ala Val Ile Gly His Ser Gly
20 25 30
Ala Gly Lys Ser Thr Leu Val Arg Leu Ile Asn Gly Leu Glu Thr Pro
35 40 45
Thr Arg Gly Arg Val Leu Val Asp Gly Thr Asp Val Ser Gln Leu Ser
50 55 60
Asp Lys Ala Met Arg Pro Leu Arg Ala Asp Ile Gly Met Ile Phe Gln

```

```

65          70          75          80
Gln Phe Asn Leu Phe Gly Ser Arg Thr Ile Tyr Asp Asn Val Ala Tyr
      85          90          95
Pro Leu Lys Leu Ala His Trp Lys Lys Ala Asp Glu Lys Lys Arg Val
      100          105          110
Thr Glu Leu Leu Ser Phe Val Gly Leu Thr Ser Lys Ala Trp Asp His
      115          120          125
Pro Asp Gln Leu Ser Gly Gly Gln Lys Gln Arg Val Gly Ile Ala Arg
      130          135          140
Ala Leu Ala Thr Lys Pro Ser Ile Leu Leu Ala Asp Glu Ser Thr Ser
      145          150          155
Ala Leu Asp Pro Glu Thr Thr Ala Asp Val Leu Ser Leu Leu Lys Arg
      165          170          175
Val Asn Ala Glu Leu Gly Val Thr Val Val Val Ile Thr His Glu Met
      180          185          190
Glu Val Val Arg Ser Ile Ala Gln Gln Val Ser Val Leu Ala Ala Gly
      195          200          205
His Leu Val Glu Ser Gly Ser Ala Arg Gln Val Phe Ala His Pro Gln
      210          215          220
Ser Glu Thr Thr Gln Arg Phe Leu Ala Thr Ile Ile Gly Gln His Pro
      225          230          235
Ser Gly Glu Glu Gln Ala Arg Leu Gln Ser Glu Asn Pro Asp Ala Arg
      245          250          255
Leu Val Asp Val Ser Ser Val Ala Ser His Ser Phe Gly Asp Ala
      260          265          270

```

<210> 217

<211> 500

<212> DNA

<213> Homo sapiens

<400> 217

```

nnacgcgtcg cgatgaaagc ggcgctgaaa ggtgccatcc agattccaac agtgactttt
60
agctctgaga agtccaatac tacagccctg gctgagttcg gaaaatacat tcataaagtc
120
tttcctacag tggtcagcac cagctttatc cagcatgaag tcgtggaaga gtagagccac
180
ctgttacta tccaaggctc ggacccacgc ttgcagccct acctgctgat ggctcacttt
240
gatgtggtgc ctgcccctga agaaggctgg gaggtgcccc cattctctgg gttggagcgt
300
gatggcgtca tctatggttg gggcacactg gacgacaaga actctgtgat ggcattactg
360
caggcccttg agctcctgct gatcaggaag tacatccccc gaagatcttt cttcattttc
420
ctgggccatg atgaggagtc atcagggaca ggggctcaga ggatctcagc cctgctacag
480
tcaaggggag tccagctagc
500

```

<210> 218

<211> 166

<212> PRT

<213> Homo sapiens

<400> 218

```

Xaa Arg Val Ala Met Lys Glu Ala Leu Lys Gly Ala Ile Gln Ile Pro
 1           5           10           15
Thr Val Thr Phe Ser Ser Glu Lys Ser Asn Thr Thr Ala Leu Ala Glu
          20           25           30
Phe Gly Lys Tyr Ile His Lys Val Phe Pro Thr Val Val Ser Thr Ser
          35           40           45
Phe Ile Gln His Glu Val Val Glu Glu Tyr Ser His Leu Phe Thr Ile
          50           55           60
Gln Gly Ser Asp Pro Ser Leu Gln Pro Tyr Leu Leu Met Ala His Phe
65           70           75           80
Asp Val Val Pro Ala Pro Glu Glu Gly Trp Glu Val Pro Pro Phe Ser
          85           90           95
Gly Leu Glu Arg Asp Gly Val Ile Tyr Gly Trp Gly Thr Leu Asp Asp
          100          105          110
Lys Asn Ser Val Met Ala Leu Leu Gln Ala Leu Glu Leu Leu Ile
          115          120          125
Arg Lys Tyr Ile Pro Arg Arg Ser Phe Phe Ile Ser Leu Gly His Asp
          130          135          140
Glu Glu Ser Ser Gly Thr Gly Ala Gln Arg Ile Ser Ala Leu Leu Gln
145          150          155          160
Ser Arg Gly Val Gln Leu
          165

```

<210> 219

<211> 361

<212> DNA

<213> Homo sapiens

<400> 219

```

acgcgttgaa acgggtatat tggggatgac gccgctgtgc aatatgcgca aggccatata
60
caaggtccgc acgtcccat gtccctcgtt ttgcacagtt cttttgcgcc gcattatggc
120
gaagccgctgc agattgcgcc tgatatcaag cgcatacagg tcaacaaccc cagccccttc
180
acttttttgc gcaccaacag ttatctgata ggccgcgata cgctggcatt gatcgatccc
240
ggtcgcgcttg acgaggccca tcacgcggcg ctgctgcgtg ccattgcggc cggcgcggtc
300
agccatatct ttgtcagcca cacacacggg gaccactcgc cagtgcgcgc ggttttgaaa
360
g
361

```

<210> 220

<211> 102

<212> PRT

<213> Homo sapiens

<400> 220

```

Met Ala Asp Arg Pro Ala Gly Asn Gly Thr Gln Gln Arg Arg Val Met

```



```

      1             5             10             15
Gly Leu Val Lys Arg Thr Gly Ile Asp Gln Cys Gln Arg Ile Ala Ala
      20             25             30
Asp Gln Ile Thr Val Gly Ala Glu Lys Ser Glu Gly Ala Gly Val Val
      35             40             45
Asp Arg Asp Ala Leu Asp Ile Arg Arg Asn Leu Asp Gly Phe Ala Ile
      50             55             60
Met Arg Arg Lys Arg Thr Val Glu Asn Glu Gly His Gly Ser Val Arg
      65             70             75             80
Thr Leu Cys Met Ala Leu Arg Ile Leu His Ser Gly Val Ile Pro Asn
      85             90             95
Ile Pro Val Ser Thr Arg
      100

```

<210> 221

<211> 401

<212> DNA

<213> Homo sapiens

<400> 221

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agatctctgtg gtcgtcggct gcaaagagga tgagcccaga tgcatatcag gggctccctc
60
ccacatccca cctgctcggg cagcccacgg cagccccaca ctgctgcagc acacctcgct
120
gcagctctgg ttcctcctca gaaatatccc tgcccaccctg ctaagccttg gccaacactg
180
caccctgtcc caatgcggct ccagtgaacca cccccccagg gcataccctc ctacagagca
240
ttcccaaaaa aggctagagt agacaccagc ctgctccgta gggggcctcc accccattct
300
ccaaggcctc caccagggga cgctcgggtga accagcatcc aggcctggcc cacctccctg
360
ctcagagtcc atgttctgtg acaagggtgg caactgggat t
401

```

<210> 222

<211> 124

<212> PRT

<213> Homo sapiens

<400> 222

```

Met Asp Ser Glu Gln Gly Gly Gly Pro Gly Leu Asp Ala Gly Ser Pro
      1             5             10             15
Gly Val Pro Gly Trp Arg Pro Trp Arg Met Gly Trp Arg Pro Pro Thr
      20             25             30
Glu Gln Ala Gly Val Tyr Ser Ser Leu Phe Trp Glu Cys Ser Val Gly
      35             40             45
Gly Tyr Ala Leu Gly Val Trp Ser Leu Glu Pro His Trp Asp Arg Val
      50             55             60
Gln Cys Trp Pro Arg Leu Ser Arg Val Ala Gly Ile Phe Leu Arg Arg
      65             70             75             80
Asn Gln Ser Cys Ser Glu Val Cys Cys Ser Ser Val Gly Leu Pro Trp
      85             90             95
Ala Ala Arg Ala Gly Gly Met Trp Glu Gly Ala Pro Asp Met His Leu

```

100 105 110
 Gly Ser Ser Ser Leu Gln Pro Thr Thr Gln Arg Ser
 115 120

<210> 223
 <211> 331
 <212> DNA
 <213> Homo sapiens

<400> 223
 tcatgaaatc tgtgggcagt gaccacaggag ggtatgggca ggcccaacca ggttggtgtg
 60
 cccttgaagc cccacagacc tgccagggca gcagggcagt tgggagccgg agaacctgag
 120
 aaccaagcca ggctgcatgc aggaggctgg cacgtgaacg ctgcaggtgt tgccggcagc
 180
 cgtggtgcct ggcagatagt gttcgacccc cnaggacctt cttgctgggc agcccgatcc
 240
 aaaagctgtt cccgcttaag ccacccccac cgccttggcc acacctggga catgggtgaa
 300
 gcaagggcac ttcccggggc ttccgtgtcc c
 331

<210> 224
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 224
 Met Pro Leu Leu His Pro Cys Ala Arg Cys Gly Gln Gly Gly Gly Gly
 1 5 10 15
 Gly Leu Ser Gly Asn Ser Phe Trp Thr Gly Leu Pro Ser Lys Val
 20 25 30
 Leu Gly Gly Arg Thr Leu Ser Ala Arg His His Gly Cys Arg Gln His
 35 40 45
 Leu Gln Arg Ser Arg Ala Ser Leu Leu His Ala Ala Trp Leu Gly Ser
 50 55 60
 Gln Val Leu Arg Leu Pro Thr Ala Leu Leu Pro Trp Gln Val Cys Gly
 65 70 75 80
 Ala Ser Arg Ala His Gln Pro Gly Trp Ala Cys Pro Tyr Pro Pro Gly
 85 90 95
 Ser Leu Pro Thr Asp Phe Met
 100

<210> 225
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 225
 tgatcacggg cgtgagccac cagcccagca tcccttgctt ttcattcgca cctccacctc
 60
 cagaatgacc ctcattccct cctgcacaga cggtgacagc agtaactcct acaaacacca
 120

ccagactgat cttcaagagc agaggaactc ccaatcacga ttccaccccc gccgggctct
 180
 caaatctctc agggctgcct gctatggggg agggaggcac actttgcttg gctctcaagg
 240
 cctcagccag cgggttccaa accaactccc agcctggcct caccatccca cgcctcaaac
 300
 ttgtctcaca ctggcccttc ttcttggaac atgggcctn
 339

<210> 226
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 226
 Met Thr Leu Ile Pro Ser Cys Thr Asp Gly Asp Ser Ser Asn Ser Tyr
 1 5 10 15
 Lys His His Gln Thr Asp Leu Gln Glu Gln Arg Asn Ser Gln Ser Arg
 20 25 30
 Phe His Pro Arg Arg Ala Leu Lys Ser Ser Arg Ala Ala Cys Tyr Gly
 35 40 45
 Gly Gly Arg His Thr Leu Leu Gly Ser Gln Gly Leu Ser Gln Pro Gly
 50 55 60
 Pro Asn Gln Leu Pro Ala Trp Pro His His Pro Thr Ala Lys Pro Leu
 65 70 75 80
 Leu Thr Leu Ala Pro Leu Pro Gly Thr Trp Ala
 85 90

<210> 227
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 227
 gtcgaccctc tcgattgtgg cgaactccat ggctgctgcg ggctcgcta ggctctcgag
 60
 tagctcgacg tcgggttcgc gagggctcgc agcgtggcca tgctgcttct tggatggttc
 120
 gggcaactcc tcgggggatt cgagcagttc ttggcgccacc tgctctggcg tcattccggga
 180
 ggccaggccg acaagtgcctg cctcctgccca cccctgagc gacgctgccca tgttagtagta
 240
 ggcgtcttca ctggctcagg cgagcgcggt atcgaccagg ttggcgctcca ggccgagaga
 300
 cagcatgtct gctcagtcgc ggtgatgact ggagtggcgg tctcctgcac ggg
 353

<210> 228
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 228
 Met Leu Ser Leu Gly Leu Asp Ala Asn Leu Val Asp Thr Ala Leu Ala

1	5	10	15
Leu Thr Ser Glu Asp Ala Val Leu Asn Met Ala Ala Ser Leu Ser Gly			
	20	25	30
Trp Gln Glu Ala Ala Leu Val Gly Leu Ala Ser Gly Met Thr Pro Glu			
	35	40	45
Gln Val Arg Gln Glu Leu Leu Glu Ser Pro Glu Glu Leu Pro Glu Pro			
	50	55	60
Ser Lys Lys Gln His Gly His Ala Ala Ser Pro Arg Glu Pro Asp Val			
65	70	75	80
Glu Leu Leu Glu Ser Leu Arg Arg Pro Ala Ala Ala Met Glu Phe Ala			
	85	90	95
Thr Ile Glu Gly Val Asp			
100			

<210> 229

<211> 743

<212> DNA

<213> Homo sapiens

<400> 229

```

nnggctaggg acacggcctc ctccccaaca ggcagtgcct gtgcaggctc aggggcatca
60
tcaaaagataa cacagggtg gtcaggggct gctggctgct cctgccccag gactggctcc
120
aggatgggca aggctgcctc cctggtagcc agggggagag gggaaggagg caccaggagg
180
tggggccagca ggtgtggcat cgccaggagg gagatggagg ccagcagcag ccaagaccag
240
agtaaatgtg ctgccccagg ggtgctcaca gccaggacc gggtagttgg aaagccagcc
300
cagcttgga ctcagcggag ccaggaggca gatgttcagg actgggagtt cagaaagagg
360
gattcccagg gcacttactc cagccgggat gcagaactcc aggaccagga attcggaaa
420
agagattcac tgggtacctc cagtagtcga gatgtaagcc ttggggactg ggaatttggg
480
aagagagatt ctctgggtgc ttatgccagc caagatgcca acgagcaggg ccaagatttg
540
gggaagaggg accaccatgg taggtacagc agccaggatg ccgatgagca ggactgggag
600
tttcagaaga gagatgtgtc actcggcacc tatggcagcg gggctcgga gccacaggaa
660
caggagtttg ggaagagcgc ttggataagg gactacagca gtgggtggcag ctccaggacc
720
cttgacgccc aggacagaag ctt
743

```

<210> 230

<211> 247

<212> PRT

<213> Homo sapiens

<400> 230

```

Xaa Ala Arg Asp Thr Ala Ser Ser Ser Thr Gly Ser Ala Cys Ala Gly

```

```

      1             5             10             15
Ser Gly Ala Ser Ser Lys Ile Thr Gln Gly Trp Ser Gly Ala Ala Gly
      20             25             30
Cys Ser Cys Pro Arg Thr Gly Ser Arg Met Gly Lys Ala Ala Ser Leu
      35             40             45
Val Ala Arg Gly Arg Gly Glu Gly Ser Thr Arg Glu Trp Ala Ser Arg
      50             55             60
Cys Gly Ile Gly Gln Glu Glu Met Glu Ala Ser Ser Ser Gln Asp Gln
      65             70             75             80
Ser Lys Val Ser Ala Pro Gly Val Leu Thr Ala Gln Asp Arg Val Val
      85             90             95
Gly Lys Pro Ala Gln Leu Gly Thr Gln Arg Ser Gln Glu Ala Asp Val
      100            105            110
Gln Asp Trp Glu Phe Arg Lys Arg Asp Ser Gln Gly Thr Tyr Ser Ser
      115            120            125
Arg Asp Ala Glu Leu Gln Asp Gln Glu Phe Gly Lys Arg Asp Ser Leu
      130            135            140
Gly Thr Tyr Ser Ser Arg Asp Val Ser Leu Gly Asp Trp Glu Phe Gly
      145            150            155            160
Lys Arg Asp Ser Leu Gly Ala Tyr Ala Ser Gln Asp Ala Asn Glu Gln
      165            170            175
Gly Gln Asp Leu Gly Lys Arg Asp His Gly Arg Tyr Ser Ser Gln
      180            185            190
Asp Ala Asp Glu Gln Asp Trp Glu Phe Gln Lys Arg Asp Val Ser Leu
      195            200            205
Gly Thr Tyr Gly Ser Arg Ala Ala Glu Pro Gln Glu Gln Glu Phe Gly
      210            215            220
Lys Ser Ala Trp Ile Arg Asp Tyr Ser Ser Gly Ser Ser Arg Thr
      225            230            235            240
Leu Asp Ala Gln Asp Arg Ser
      245

```

<210> 231

<211> 431

<212> DNA

<213> Homo sapiens

<400> 231

```

acgcgttgcc caccgagagg ctggcgaggg tgtgcagcac ggcgagtggt ggcagggtcc
60
cagggtgcag cctgcgcagc agctcctcca tcaccttgct gatgaactgt cttcccacgg
120
ccaccaggac gccactcgcc gcctgctgcc agtccagac caggctcctc gtcttggtca
180
tctcgttgga ggccaggagg atgatggtgc tggctgtgtc cttgtccagc tcactggcgc
240
gactgctcag gacctctcc atggccctca ggaccgctgc tcggtatggg tgtgccagct
300
tgtcatgctg ccgcagatac tcctcgagg caccgagcgt ctccaccctg ctggagccca
360
tcaccgataa ggacccccctg gtgcaggagc aggtctgcag tgccctgtgc tcctcgggg
420
aggtgcggcc g
431

```

<210> 232
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 232
 Met Ala Ser Ser Arg Val Glu Thr Leu Arg Ala Cys Glu Glu Tyr Leu
 1 5 10 15
 Arg Gln His Asp Lys Leu Ala His Pro Tyr Arg Ala Ala Val Leu Arg
 20 25 30
 Ala Met Glu Arg Val Leu Ser Ser Arg Ala Ser Glu Leu Asp Lys Asp
 35 40 45
 Thr Ala Ser Thr Ile Ile Leu Leu Ala Ser Ser Glu Met Thr Lys Thr
 50 55 60
 Lys Asp Leu Val Trp Asp Trp Gln Gln Ala Ala Ser Gly Val Leu Val
 65 70 75 80
 Ala Val Gly Arg Gln Phe Ile Ser Lys Val Met Glu Glu Leu Leu Arg
 85 90 95
 Arg Leu His Pro Gly Thr Leu Pro His Cys Ala Val Leu His Thr Leu
 100 105 110
 Ala Ser Leu Ser Val Ala Asn Ala
 115 120

<210> 233
 <211> 606
 <212> DNA
 <213> Homo sapiens

<400> 233
 acgcgttcag ggaatgccaga aatctaactg ggtaataaaaa agctggggaga acattccaga
 60
 aaaggtgggca cccttagcat tcccaaaaag caccagccct cctcatcctt cccagcttct
 120
 gtgctggaat gcacccccat cggaagggt cgaaaactca ggacacatta ggatcacctg
 180
 gaaagcattt gtcaaaacgc atctccctgc gggtcagggt ccaagttaaa atcaaaactc
 240
 aggtgatgct gactcagggt gctccagaaa cacctgggga agcagcactt tggaggctgc
 300
 ctctcacatc caccaccag caagtgggca gggagctagg taaatctcct tccagttga
 360
 gaaggggctc ggagcaggca cagagaagag atacccttag aatgcaagtt gttcagctgc
 420
 gaaagtcacg cctgcaggct tcctggggca gctagtggg tgaagtatgc cacagcaaca
 480
 ggcttctaga gcgggtgcc cagctcctac tctgcctctg ccaactcactg actgtgtggg
 540
 cttgagcagg tcacctgtct gacttggtga gagctgacag gcatcacctg ttagaggctt
 600
 acgcgt
 606

<210> 234

<211> 108

<212> PRT

<213> Homo sapiens

<400> 234

```

Met His Pro His Arg Lys Gly Ser Lys Thr Gln Asp Thr Leu Gly Ser
 1             5             10             15
Pro Gly Lys His Leu Ser Lys Arg Ile Ser Leu Arg Val Arg Val Gln
                20             25             30
Val Lys Ile Lys Leu Gln Val Met Leu Thr Gln Val Ala Pro Glu Thr
                35             40             45
Pro Gly Glu Ala Ala Leu Trp Arg Leu Pro Leu Thr Ser Thr Pro Gln
                50             55             60
Gln Val Gly Arg Glu Leu Gly Lys Ser Pro Ser Gln Leu Arg Arg Gly
65                70             75             80
Ser Glu Gln Ala Gln Arg Arg Asp Thr Leu Arg Met Gln Val Val Gln
                85             90             95
Leu Arg Lys Ser Ser Leu Gln Ala Ser Trp Ala Ser
                100             105

```

<210> 235

<211> 328

<212> DNA

<213> Homo sapiens

<400> 235

```

cgaccgttga ctattctcta caaaccacaa agacaatgat tgatttaact gaatttagaa
60
atagcaaaca cttaaaacag cagcagtaca gagctgaaaa ccagattctt ttgaaagaga
120
ttgaaagtct agaggaagaa cgacttgatc tgaaaaaaaaa aattcgccaa atggctcaag
180
aaagagggaaa aagaagggca acttcaggat taaccactgg ggacctgaac ctaactgaaa
240
acatttctca aggagataga ataagtgaaa gaaaattgga ttatttgagc ctcaaaaata
300
tgagtgaagc acaatcaaag aatgaatt
328

```

<210> 236

<211> 97

<212> PRT

<213> Homo sapiens

<400> 236

```

Met Ile Asp Leu Thr Glu Phe Arg Asn Ser Lys His Leu Lys Gln Gln
 1             5             10             15
Gln Tyr Arg Ala Glu Asn Gln Ile Leu Leu Lys Glu Ile Glu Ser Leu
                20             25             30
Glu Glu Glu Arg Leu Asp Leu Lys Lys Lys Ile Arg Gln Met Ala Gln
                35             40             45
Glu Arg Gly Lys Arg Arg Ala Thr Ser Gly Leu Thr Thr Gly Asp Leu
                50             55             60
Asn Leu Thr Glu Asn Ile Ser Gln Gly Asp Arg Ile Ser Glu Arg Lys

```

65	70	75	80
Leu Asp Leu Leu Ser	Leu Lys Asn Met	Ser Glu Ala Gln Ser	Lys Asn
	85	90	95
Glu			

<210> 237

<211> 2059

<212> DNA

<213> Homo sapiens

<400> 237

```

ggccataagg gcacgacgca ttcctagccg atgcaccaac acgggcatga agcctgccga
60
gagcacgaag ccggcggtcca tagctacggc ccatcaggtc atgtctgccg tggctccgtt
120
gatgtcagac tgcacatgaa atcgggttacg gtacccccagg atcatcgcta ccgagtacac
180
cccgaaacagc acccgctggg cgccgatcag cgtgaggagg tgccccacca gtggcacttt
240
tcttagatag cggaacccat ccaccacatc ccagtcacc gttctcatcg tccgggaacg
300
atccaccagt ggccggccaa gctcccgacg tgaaaactgc agccccatag cgaccgagac
360
tgccaagagg gctgcggaga tgcagaaaat gatcgtgtcg gcgtggtgca cagggaatatg
420
gcgtccggca atcatgcgca ctgctgcagc aacaaccgca ccgatcatga gccctagcgg
480
ccaatcgttg gcatgattga cgatgccgtc aggtagtgcg gcttgtcgat ggtgtattcc
540
aaccacagca ccaaggcggt gagcaaaaac cggttcaggc tcatcgcgat gagcaacca
600
atgagcaagg ccagggtgga gggcttatcg cgcgcaccac ccagaccaa gatccccagc
660
ccgacccagg tgacggcagc cattcatctg cgtattgtcc gactacaccc gtgaggggcg
720
tctctgatct gcagctcatc aaggttacgc gactgcagta cctcaatgca etcctggcta
780
cccagccca gaacctgcca cagtccctg agaacaccga cctgcagggt attccaggca
840
gccagaccag gctccttggg gagaagacca ccacagcggc agctttccca gtageccttt
900
ccctctttgg cacagttgga acctccagtt gataaatgac tgtggactag cgcgcgtttt
960
ttgttttcag agcacacgta aggggtccagc cacagcaggc ccggcgctccc ggtggaaggc
1020
agccctgggc ggaacccagg cgtttaacgg ctactaggc agccccagat ctggggaaggc
1080
agatgagcac gtggggagct ggagtgaact gagcagaagt tttgtgccc cctgccccca
1140
tcccctccag gccacgtttt agatggccct tgtagtgtcg ggtcctgggt gtcctcagaa
1200
ctagacatca atgcctggat ccttcagccg gccctgccct cctttaggag acaggagtca
1260

```


ccagggcaca gccctccagg cccgcctcag gaaggaatga aaggaatgcc atcatctcta
 1320
 gttccccagg cccagccttc cccttctccc cgggggcagg gacagtgcgg catattcaga
 1380
 ttcagacctc tttgggctga gccaccttgt gagtgcagtt actgcctttg tgtggccgtg
 1440
 acctctattt gtttgctttt aatttgccaa cctatcgctg ctggcagcac tttttgagca
 1500
 agccgagagc acccattttg gctggggatt cagatcgatg gccttgctcca tgttgtcctt
 1560
 tctggcttcc ctgatggtgt catgtttcag cgcagtcgccc ccagcctttc ccattgtgcca
 1620
 aaccagaagc tccactgccc gtaggctgtc cctgtagccc tgctccctcc ctggaggctg
 1680
 ctcttctgat tctgagagct ggccatgtgg tgctgagggc ccttttctgc tctctgccc
 1740
 acctgctgag ttgccactcg cagtgttgtc agttcccggtg ttctgagaag aggtcatgcc
 1800
 tgggaggaag ggatcgatcat gctgcatcga atcctctctc cgccgtgtgg cccccaggag
 1860
 agtagctgcc tgttgcaact gctccacacc tccccacagc ctccctgcag gtgctgtgtg
 1920
 gccgtgatgt gcagagagca gtgagggagg gttcatgaac cagggtggatc ctctttaaaa
 1980
 aaaaaaaaaa tttttgttat atctctaaaa tcccatagct aggaacagaa aaaaaggaaa
 2040
 agacttgaaa tgttctaga
 2059

<210> 238

<211> 129

<212> PRT

<213> Homo sapiens

<400> 238

Ala	Glu	Gln	Lys	Phe	Cys	Ala	Arg	Leu	Pro	Pro	Ser	Pro	Pro	Gly	His
1				5				10						15	
Val	Leu	Asp	Gly	Pro	Cys	Ser	Cys	Gly	Ser	Trp	Val	Ser	Ser	Glu	Leu
			20					25					30		
Asp	Ile	Asn	Ala	Trp	Ile	Leu	Gln	Pro	Ala	Leu	Pro	Ser	Ser	Phe	Arg
		35				40						45			
Gln	Glu	Ser	Pro	Gly	His	Ser	Pro	Pro	Gly	Pro	Pro	Gln	Glu	Gly	Met
	50				55						60				
Lys	Gly	Met	Pro	Ser	Ser	Leu	Val	Pro	Arg	Ala	Gln	Pro	Ser	Pro	Ser
	65				70				75					80	
Pro	Pro	Gly	Gln	Gly	Gln	Cys	Gly	Ile	Phe	Arg	Phe	Arg	Pro	Leu	Trp
			85					90						95	
Ala	Glu	Pro	Pro	Cys	Glu	Cys	Ser	Tyr	Cys	Leu	Cys	Val	Ala	Val	Thr
			100					105					110		
Ser	Ile	Cys	Leu	Leu	Leu	Ile	Cys	Gln	Pro	Ile	Ala	Ala	Gly	Ser	Thr
			115				120						125		

Phe

<210> 239

<211> 388

<212> DNA

<213> Homo sapiens

<400> 239

```

nctctagatca ctctgtagcg catgggttaaa tgctgacaca atagaaaagt gcgaggacat
60
cctcgaatta atgagatgggt ggactggatg agtcaagttc tcgtcgttgc ggcggctgtc
120
ggtcagctgc cctctctcca cttctgcttc tcggcggttac cccataccgt attggccgcg
180
tgttcacctt tgaatgcagc catgtcgtcg tctccgtatc gaaatgatgt gccatcgaag
240
atgccgacct cagcatcggc atctgcagtg atgagtgcgt atcgccgccac acgaaacgcc
300
cagcgcaacc gtgtctctgc acgatacgaa gtgcttgsgt atctcagctc tggtagctat
360
ggtcgtgtat ataaagcaaa ggaacttn
388

```

<210> 240

<211> 104

<212> PRT

<213> Homo sapiens

<400> 240

```

Met Val Asp Trp Met Ser Gln Val Leu Val Val Ala Ala Ala Val Gly
1 5 10 15
Gln Leu Pro Leu Leu His Phe Cys Phe Ser Ala Leu Pro His Thr Val
20 25 30
Leu Ala Ala Cys Ser Pro Leu Asn Ala Ala Met Ser Ser Ser Pro Tyr
35 40 45
Arg Asn Asp Val Pro Ser Lys Met Pro Thr Ser Ala Ser Ala Ser Ala
50 55 60
Val Met Ser Ala Tyr Arg Ala Thr Arg Asn Ala Gln Arg Asn Arg Val
65 70 75 80
Leu Ala Arg Tyr Glu Val Leu Gly Tyr Leu Ser Ser Gly Thr Tyr Gly
85 90 95
Arg Val Tyr Lys Ala Lys Glu Leu
100

```

<210> 241

<211> 330

<212> DNA

<213> Homo sapiens

<400> 241

```

ncggggggcc gagttgaaag ctgccggcac actggctgtg ctgcttgctt cacttctctg
60
gatgctgctt ccagggcggg cctgggggaa acatcggcct tcccaggcac ccttagcccc
120
tcccatctgg gggcccttag cacagtcctt gggacccccc atgctgcctt tcaggctgat
180

```

gtggggcaaac tcggcagccc agcctactcc cggggccatgg gccaccatct cagcttcctt
 240
 ggggctaagc cgtgtgctct gaatcaaaag cagtagtggc atcggcgcca ctggcgccat
 300
 gggaacggg ttgacttgca caaccagcac
 330

<210> 242

<211> 100

<212> PRT

<213> Homo sapiens

<400> 242

Met	Ala	Pro	Val	5	Pro	Met	Pro	Leu	Leu	Leu	Ile	Gln	Ser	Thr
1				5				10				15		
Arg	Leu	Ser	Pro	Arg	Glu	Ala	Glu	Met	Val	Ala	His	Gly	Pro	Gly
			20				25					30		
Gly	Trp	Ala	Ala	Glu	Phe	Ala	His	Ile	Ser	Leu	Lys	Gly	Ser	Met
			35				40					45		
Gly	Pro	Arg	Asp	Cys	Ala	Lys	Gly	Pro	Gln	Met	Gly	Arg	Ala	Lys
			50			55				60				
Ala	Trp	Glu	Gly	Arg	Cys	Phe	Pro	Gln	Ala	Arg	Pro	Gly	Ser	Ser
65					70					75				80
Pro	Arg	Ser	Glu	Ala	Ser	Ser	Thr	Ala	Ser	Val	Pro	Ala	Ala	Phe
				85					90					95
Ser	Ala	Pro	Arg											
			100											

<210> 243

<211> 330

<212> DNA

<213> Homo sapiens

<400> 243

nnaccttctc tccgcgttat taccaaagat gctatgcacg taactgcgga ggaaattctt
 60
 cacacaggcc accccgcccc cactgcgctc gtcgctaata ttcctataa cgttgcggtg
 120
 cccgtactgc tacacatgct agatattctc ccctccttgc ggactacagt ggtgatggtg
 180
 caggcagaag tagccgatcg attggctgcc acaccaggca gccgcattta cgggtgtcccc
 240
 agcgtcaaag tcaactttta cgggactgtc tcgctgtcgg gagcaattgg acgcaatgtc
 300
 ttctggccgg ctccaatgt tgattctggn
 330

<210> 244

<211> 110

<212> PRT

<213> Homo sapiens

<400> 244

Xaa Pro Ser Leu Arg Val Ile Thr Lys Asp Ala Met His Val Thr Ala

```

      1           5           10           15
Glu Glu Ile Leu His Thr Gly His Pro Ala Pro Thr Ala Leu Val Ala
      20           25           30
Asn Leu Pro Tyr Asn Val Ala Val Pro Val Leu Leu His Met Leu Asp
      35           40           45
Ile Leu Pro Ser Leu Arg Thr Thr Val Val Met Val Gln Ala Glu Val
      50           55           60
Ala Asp Arg Leu Ala Ala Thr Pro Gly Ser Arg Ile Tyr Gly Val Pro
65      70      75
Ser Val Lys Val Asn Phe Tyr Gly Thr Val Ser Arg Ala Gly Ala Ile
      85           90           95
Gly Arg Asn Val Phe Trp Pro Ala Pro Asn Val Asp Ser Gly
      100          105          110

```

<210> 245

<211> 355

<212> DNA

<213> Homo sapiens

<400> 245

```

tctagatcct gaatcaccca cctcctagtt teggattcac ctccgccggc gtcacctgaa
60
aacaatgtcg agcccgaaatg gatgatggta gccacaccca tctcggaag gtggaatgca
120
gcgtgttgca gaaacagaag ttgaccgtcg gaggtaggcg gcattcgctt cggatcgaag
180
cgtccccagg catccatctc gagttgacga cgaaaatctt tccagtccac gccgtagggg
240
ganttgcaaa ccacagcatc gaattgtgcc agaaggaagt ggtcgttggt gagggatttg
300
ccccattcaa tacgcgcac tcctccggaag cgcgcctcta ttgcggccaa cgcgt
355

```

<210> 246

<211> 101

<212> PRT

<213> Homo sapiens

<400> 246

```

Met Arg Val Leu Asn Gly Ala Ile Pro Ser Pro Thr Thr Thr Ser Phe
1      5      10      15
Trp Thr Asn Ser Met Leu Trp Leu Pro Xaa Pro Pro Thr Ala Trp Thr
      20      25      30
Gly Lys Ile Phe Val Val Asn Ser Arg Trp Met Pro Arg Asp Ala Ser
      35      40      45
Ile Arg Ser Glu Cys Arg Leu Pro Pro Thr Val Asn Phe Cys Phe Cys
50      55      60
Asn Thr Leu His Ser Thr Phe Pro Arg Trp Val Trp Leu Pro Ser Ser
65      70      75      80
Ile Arg Ala Arg His Cys Phe Gln Val Thr Pro Ala Glu Val Asn Pro
      85      90      95
Lys Leu Gly Gly Gly
      100

```

<210> 247
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 247
 atggccgcga atgggcacgc tgtcatgggc gtctctcccc gctacgacca gtacaaggac
 60
 gcctggggaca ccagcgctcgt gtccgagatc aagatgggag acagggtacga gacggctcagg
 120
 ttctttccact gctacaagcg cggagtgagg cgcggtgttcg ttgaccaccc actgttctcg
 180
 gagaggggttt ggggaaagac cgaggagaag atctacgggc ctgacgctgg aacggactac
 240
 agggacaacc agctgcggtt cagcctgcta tgccaggcag cacttgaagc tccaaggatc
 300
 ctgagcctca acaacaaccc atacttctcc gga
 333

<210> 248
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 248
 Met Ala Ala Asn Gly His Arg Val Met Val Val Ser Pro Arg Tyr Asp
 1 5 10 15
 Gln Tyr Lys Asp Ala Trp Asp Thr Ser Val Val Ser Glu Ile Lys Met
 20 25 30
 Gly Asp Arg Tyr Glu Thr Val Arg Phe Phe His Cys Tyr Lys Arg Gly
 35 40 45
 Val Asp Arg Val Phe Val Asp His Pro Leu Phe Leu Glu Arg Val Trp
 50 55 60
 Gly Lys Thr Glu Glu Lys Ile Tyr Gly Pro Asp Ala Gly Thr Asp Tyr
 65 70 75 80
 Arg Asp Asn Gln Leu Arg Phe Ser Leu Leu Cys Gln Ala Ala Leu Glu
 85 90 95
 Ala Pro Arg Ile Leu Ser Leu Asn Asn Pro Tyr Phe Ser Gly
 100 105 110

<210> 249
 <211> 5503
 <212> DNA
 <213> Homo sapiens

<400> 249
 atgacccagg ggattttggc cttggtcacg tccactggct gtgcatctgc caatgccctg
 60
 cagtcctcga cggatgccat gcacatccca cacctctttg tccagcgcaa cccgggaggg
 120
 tcgccaagca ccgcatgcca cctgaacccc agccccgatg gtgaggccta cacactggct
 180
 tcgagaccac ccgtccgcct caatgatgtc atgctcaggc tgggtgacgga gctgcgctgg
 240

cagaagttcg tcatgttcta cgacagcgag tatgatattc gtgggcttca aagctttctg
300
gaccaggcct cgcggctggg ccttgacgtc tctttacaaa aggtggacaa gaacattagc
360
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420
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<211> 927

<212> PRT

<213> Homo sapiens

<400> 250

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			20					25					30		
Phe	Val	Gln	Arg	Asn	Pro	Gly	Gly	Ser	Pro	Arg	Thr	Ala	Cys	His	Leu
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Asn	Pro	Ser	Pro	Asp	Gly	Glu	Ala	Tyr	Thr	Leu	Ala	Ser	Arg	Pro	Pro
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Val	Arg	Leu	Asn	Asp	Val	Met	Leu	Arg	Leu	Val	Thr	Glu	Leu	Arg	Trp
					70					75				80	
Gln	Lys	Phe	Val	Met	Phe	Tyr	Asp	Ser	Glu	Tyr	Asp	Ile	Arg	Gly	Leu
				85					90					95	
Gln	Ser	Phe	Leu	Asp	Gln	Ala	Ser	Arg	Leu	Gly	Leu	Asp	Val	Ser	Leu
			100					105					110		
Gln	Lys	Val	Asp	Lys	Asn	Ile	Ser	His	Val	Phe	Thr	Ser	Leu	Phe	Thr
			115				120					125			
Thr	Met	Lys	Thr	Glu	Glu	Leu	Asn	Arg	Tyr	Arg	Asp	Thr	Leu	Arg	Arg
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Asn	Glu	Glu	Ile	Ser	Asp	Pro	Glu	Ile	Leu	Asp	Leu	Val	His	Ser	Ala
			180					185					190		
Leu	Gly	Arg	Met	Thr	Val	Val	Arg	Gln	Ile	Phe	Pro	Ser	Ala	Lys	Asp
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			210			215					220				
Asp	Pro	Gln	Glu	Gly	Tyr	Leu	Gln	Met	Leu	Gln	Ile	Ser	Asn	Leu	Tyr
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Leu	Tyr	Asp	Ser	Val	Leu	Met	Leu	Ala	Asn	Ala	Phe	His	Arg	Lys	Leu
				245					250					255	
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 Lys Gly His Ile Thr Gly Leu Thr Gly Val Met Glu Phe Arg Glu Asp
 290 295 300
 Ser Ser Asn Pro Tyr Val Gln Phe Glu Ile Leu Gly Thr Thr Tyr Ser
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 Glu Thr Phe Gly Lys Asp Met Arg Lys Leu Ala Thr Trp Asp Ser Glu
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 Lys Gly Leu Asn Gly Ser Leu Gln Glu Arg Pro Met Gly Ser Arg Leu
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 Gln Gly Leu Thr Leu Lys Val Val Thr Val Leu Glu Glu Pro Phe Val
 355 360 365
 Met Val Ala Glu Asn Ile Leu Gly Gln Pro Lys Arg Tyr Lys Gly Phe
 370 375 380
 Ser Ile Asp Val Leu Asp Ala Leu Ala Lys Ala Leu Gly Phe Lys Tyr
 385 390 395 400
 Glu Ile Tyr Gln Ala Pro Asp Gly Arg Tyr Gly His Gln Leu His Asn
 405 410 415
 Thr Ser Trp Asn Gly Met Ile Gly Glu Leu Ile Ser Lys Arg Ala Asp
 420 425 430
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 Phe Ala Val Trp Ala Cys Ile Ala Ala Ala Ile Pro Val Val Gly Val
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 Ser Met Ala Met Arg Ile Val Met Gly Ser Trp Trp Leu Phe Thr Leu
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 Ile Val Cys Ser Ser Tyr Thr Ala Asn Leu Ala Ala Phe Leu Thr Val
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 580 585 590
 Val Glu Met Ser Tyr Gly Thr Val Arg Asp Ser Ala Val Tyr Glu Tyr
 595 600 605
 Phe Arg Ala Lys Gly Thr Asn Pro Leu Glu Gln Asp Ser Thr Phe Ala
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 Glu Leu Trp Arg Thr Ile Ser Lys Asn Gly Gly Ala Asp Asn Cys Val
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 Ser Ser Pro Ser Glu Gly Ile Arg Lys Ala Lys Lys Gly Asn Tyr Ala
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 Phe Leu Trp Asp Val Ala Val Val Glu Tyr Ala Ala Leu Thr Asp Asp
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 675 680 685
 Gly Ile Ala Leu Gln His Gly Ser Pro Tyr Arg Asp Leu Phe Ser Gln

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Lys Trp Trp Pro His Met Gly Arg Cys Asp Leu Thr Ser His Ala Ser
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Ala Gln Ala Asp Gly Lys Ser Leu Lys Leu His Ser Phe Ala Gly Val
        740                745                750
Phe Cys Ile Leu Ala Ile Gly Leu Leu Leu Ala Cys Leu Val Ala Ala
        755                760                765
Leu Glu Leu Trp Trp Asn Ser Asn Arg Cys His Gln Glu Thr Pro Lys
        770                775                780
Glu Asp Lys Glu Val Asn Leu Glu Gln Val His Arg Arg Met Asn Ser
        785                790                795                800
Leu Met Asp Glu Asp Ile Ala His Lys Gln Ile Ser Pro Ala Ser Ile
        805                810                815
Glu Leu Ser Ala Leu Glu Met Gly Gly Leu Ala Pro Thr Gln Thr Leu
        820                825                830
Glu Pro Thr Arg Glu Tyr Gln Asn Thr Gln Leu Ser Val Ser Thr Phe
        835                840                845
Leu Pro Glu Gln Ser Ser His Gly Thr Ser Arg Thr Leu Ser Ser Gly
        850                855                860
Pro Ser Ser Asn Leu Pro Leu Pro Leu Ser Ser Ser Ala Thr Met Pro
        865                870                875                880
Ser Met Gln Cys Lys His Arg Ser Pro Asn Gly Gly Leu Phe Arg Gln
        885                890                895
Ser Pro Val Lys Thr Pro Ile Pro Met Ser Phe Gln Pro Val Pro Gly
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 <211> 291
 <212> DNA
 <213> Homo sapiens

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 gagtaccacc attcgggtgac cctgctgctg cgggtgcgcg ggaactcacc tctggaacga
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<210> 252
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 252
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      20           25           30
Arg Ala Ser Val Val Ile Leu Ile Glu Tyr His His Ser Val Thr Leu
      35           40           45
Leu Leu Arg Val Arg Gly Asn Ser Pro Leu Glu Arg Glu Ala Leu Glu
      50           55           60
Ala Arg Arg Arg Ile Asp Ala Lys Val Pro Ala Leu Val Glu Ser Ala
      65           70           75           80
Ile Ala Glu Gly Gly Leu Arg Ser Asp Phe Thr Pro Gly Leu Ile Thr
      85           90           95
Arg

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<210> 253
<211> 327
<212> DNA
<213> Homo sapiens

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cccacatgtc ggcatgtatg gcgggcacct tgccggagaa ggccgggaag gtcgagcgag
180
ccaatgaccg tcgcacggtc ggcacgctcc acgagcggga cgagaagctc gcgcgaggac
240
gctcactcgt cgcggtgtcc tcgcggtctt ccatcacctg ccctgcgaca tggaacgcc
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<210> 254
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<212> PRT
<213> Homo sapiens

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Arg Ala Leu Thr Val Leu Tyr Arg Pro Ile Ser Gln Pro Ser Ala Asp
      20           25           30
Arg Ser Thr Asn Arg Ala His Met Ser Ala Val Met Ala Gly Thr Leu
      35           40           45
Arg Glu Lys Ala Gly Lys Val Glu Arg Ala Asn Asp Arg Arg Thr Val
      50           55           60
Gly Thr Leu His Glu Arg Asp Glu Lys Leu Ala Ala Gly Arg Ser Leu
      65           70           75           80
Val Ala Val Ser Ser Ala Val Ser Ile Thr Val Pro Ala Thr Trp Asn
      85           90           95
Ala His Asp Phe Gly Arg Arg Leu Asp Ala
      100           105

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<210> 255
 <211> 372
 <212> DNA
 <213> Homo sapiens

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<210> 256
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 256
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 20 25 30
 Trp Met Met Pro Gly Gly Ser Gly Ile Glu Leu Thr Arg Arg Leu Lys
 35 40 45
 Lys Asp Ser Thr Thr Ala Glu Ile Pro Val Ile Leu Leu Thr Ala Lys
 50 55 60
 Ser Glu Glu Asp Asn Lys Ile Gln Gly Leu Glu Val Gly Ala Asp Asp
 65 70 75 80
 Tyr Ile Thr Lys Pro Phe Ser Pro Arg Glu Leu Val Ala Arg Leu Lys
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 Ile Asp Gly Leu Thr Leu Asp Pro Ile Ser Gln Arg
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<210> 257
 <211> 639
 <212> DNA
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<210> 258
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 258
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 Met Cys Ala Gln Val Leu Ala Glu Arg Phe Gly Leu Gly Gly Ile Phe
 35 40 45
 Phe Gly Leu Pro Thr Met Ala Thr Ser Asn Pro Met Phe Gly Arg Val
 50 55 60
 Arg Glu Trp Leu Asp Ala Val Pro Ala Lys Asp Pro Ser Ser Ile Ser
 65 70 75 80
 Leu Ala His Ser Lys Ala Gly Leu Asn Glu Glu Tyr Gln Gln Leu Met
 85 90 95
 Pro Trp Asn Ala Thr Met Ala Val Tyr Asp Glu Gly Ala Gly Thr Gln
 100 105 110
 Arg Glu Ala Ser Ala Ile Val His Glu Trp Phe Leu Gly Arg Lys Arg
 115 120 125
 Ala Ile Leu Ala Asp His Val Val Gly Thr Ile Asp Gln Ala Leu Phe
 130 135 140
 Thr Gly Leu Lys Ala Lys His Val Val Leu Arg His Leu Gly Leu Ala
 145 150 155 160
 Ser Lys Val Val Ile Ile Asp Glu Val His Ala Ala Asp Val Tyr Met
 165 170 175
 Arg Glu Tyr Leu Lys Val Val Leu Glu Trp Leu Gly Ala Tyr Arg Thr
 180 185 190
 Pro Val Ile Leu Met Ser Ala Thr Leu Pro Pro Ala Gln Arg His Glu
 195 200 205
 Leu Ala Leu Ala Tyr
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<210> 259
 <211> 252
 <212> DNA
 <213> Homo sapiens

<400> 259
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<210> 260
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 260
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 20 25 30
 Val Met Cys Thr Cys Ala Xaa Val Cys Xaa Cys Val Cys Met Xaa Val
 35 40 45
 Cys Thr Cys Ala Leu Xaa Cys Gly Val Tyr Ala Trp Cys Val His Met
 50 55 60
 Ser Thr Val Trp Cys Val Cys Met Val Xaa Cys Thr Cys Ala Leu Cys
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<210> 261
 <211> 1202
 <212> DNA
 <213> Homo sapiens

<400> 261
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 ctgtggggcg gcatcgctct cggatcgctg ggaatcatca acggttacgc gggggcctta
 120
 ttcaaaagcgc tcggctggat tccgatcttt tccgaagatc cgtcgtgttc ctcggctact
 180
 ggcacggtct accttgccag tctcgtcctg gccatcatga tctcgccaat tatcactgct
 240
 gttagccgcg acgtcatgcc ccgaacgccc catgatcaag tcgaggccgc gctcgccttc
 300
 ggatcgacgc gctgggaggt catcaagctt gcagtgttcc cccactcgcg gtccggcatc
 360

atttccggat ccatgttggg tctaggacgc gccctcggcg agaccctggc tgtcaccctc
 420
 atcctgcaga ccatgagccc catggcgctc aaacagaacc tcaacctgtc gatcttcgtc
 480
 ggtgggtgaga cattcgcgtc gaagattgcc ggtaacttct ccgagggccat tagcgatccc
 540
 accctcgctg gtgcctcgt ggcgctcgcc ctggccctgt tcgtcattac ctctgtggtc
 600
 aacgcgactg cccggttgat tgcggcgaag ggggttaagc gatgagcgcc accacccctg
 660
 accacatcac ccaccatggc gacaacacgc ccggacagct agatctctcc cgcccgtctg
 720
 gtaaacggac tatcaagagc ggctgcgcct caacattcat gatcgtggcc accgtactgg
 780
 ctgttatccc actggcctgg ctgctcttcg cgcccgctcc gcgcggcatc ggatcactat
 840
 tccacgcgtc gtgggtggacc cactcgatgg atccctcctt cgacttggcc gagcagggcg
 900
 ccaccacgc tatcgtcgga acccttgaaa ttggccttat tacatcgatt atctcggtag
 960
 cgatcgctct gatgaccgag atcttcctag tcgagtagc ccgcggaact aagatcgcca
 1020
 aggtcattag ctctgcgcgt gacgtgctaa ccggtgtacc ttcaatcgct gcggccctct
 1080
 tcgtcttcgc cgtagtcgtt accaccttcg gtggcaccca atccgcgtgg gcctctcgt
 1140
 tggccctcat gatcctcatg gttccgacgg tgctcgcgac aaccgaggaa atgctcaagc
 1200
 tt
 1202

<210> 262

<211> 214

<212> PRT

<213> Homo sapiens

<400> 262

Ala Ser Pro Val Ala Phe Val Val Asp Leu Leu Ala Ala Val Pro Ser
 1 5 10 15
 Ile Val Phe Gly Leu Trp Gly Gly Ile Val Phe Gly Ser Ser Gly Ile
 20 25 30
 Ile Asn Gly Tyr Ala Gly Ala Leu Phe Lys Ala Leu Gly Trp Ile Pro
 35 40 45
 Ile Phe Ser Glu Asp Pro Ser Trp Ser Ser Ala Thr Gly Thr Val Tyr
 50 55 60
 Leu Ala Ser Leu Val Leu Ala Ile Met Ile Leu Pro Ile Ile Thr Ala
 65 70 75 80
 Val Ser Arg Asp Val Met Pro Arg Thr Pro His Asp Gln Val Glu Ala
 85 90 95
 Ala Leu Ala Leu Gly Ser Thr Arg Trp Glu Val Ile Lys Leu Ala Val
 100 105 110
 Phe Pro His Ser Arg Ser Gly Ile Ile Ser Gly Ser Met Leu Gly Leu
 115 120 125
 Gly Arg Ala Leu Gly Glu Thr Leu Ala Val Thr Leu Ile Leu Gln Thr


```

      130              135              140
Met Ser Pro Met Ala Leu Lys Gln Asn Leu Asn Leu Ser Ile Phe Val
145              150              155              160
Gly Gly Glu Thr Phe Ala Ser Lys Ile Ala Gly Asn Phe Ser Glu Ala
      165              170              175
Ile Ser Asp Pro Thr Ser Leu Gly Ala Leu Val Ala Ser Ala Leu Ala
      180              185              190
Leu Phe Val Ile Thr Phe Val Val Asn Ala Thr Ala Arg Leu Ile Ala
      195              200              205
Ala Lys Gly Val Lys Arg
      210

<210> 263
<211> 424
<212> DNA
<213> Homo sapiens

```

```

<400> 263
acgcgtgagtgctctgcgctggaaacaacggtgatagagccatccgccgtgaacttttc
60
gacgtgtgtgcctcgtgaacaa gctcgaaaagtatgtacgcgaacgtacctc ggaagacggt
120
gcgcacatgg aagaggatgcggaccagacggcaacgaca tcctcacgac gatcctgctg
180
tcgaactggg atccactattggatgatgcgacgcaggatc atgtgtgtggc catgcaaaag
240
gcttatatgg cctcgccattcgtgccaat ttggacctggcatacccatc ttcgacgcca
300
caggcccagtc cccagccggc gatgccgccg tgggagacagggacctcagc cagtagcatg
360
gcggatgctcgtgaatttgcgctgctgaagctgtacctgcgtagcttgctgcagaagcac
420
gann
424

```

```

<210> 264
<211> 99
<212> PRT
<213> Homo sapiens

```

```

<400> 264
Met Glu Glu Asp Ala Asp Gln Thr Gly Asn Asp Ile Leu Thr Thr Ile
1      5      10      15
Leu Leu Ser Asn Trp Asp Pro Leu Leu Asp Met Thr Thr Gln Asp His
      20      25      30
Val Leu Ala Met Gln Lys Ala Tyr Met Ala Ser Pro Phe Arg Ala Asn
      35      40      45
Leu Asp Leu Ala Tyr Pro Ser Ser Thr Pro Gln Ala Gln Ser Gln Pro
      50      55      60
Ala Met Pro Pro Trp Glu Thr Gly Thr Ser Ala Ser Ser Met Ala Asp
65      70      75      80
Ala Arg Glu Phe Ala Leu Leu Lys Leu Tyr Leu Arg Ser Leu Leu Gln
      85      90      95
Lys His Xaa

```

<210> 265
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 265
 ncgtacggcc ctggcgctccg catggacgag ggataccatt ccggcatgac ggtgccgggt
 60
 gcccttcgact cccctcatcg cgagctcacc atcactggtg atagccgtga gcaagccctg
 120
 gctcgagctg cccgcgcctt cgacgaaatc gtcacgacg gcatgccgac ggtcattccc
 180
 tttcaccagg cggtggttca cgacccggct ttcactgccg ccgacggctg cttcggcgctc
 240
 tttaccgact ggatcgaaac cgagttcgac aacaagatcg agccatacac cgggtctctg
 300
 ggcgagtctg ccaattccga gcctcctcgt gaggtcgctg tcgaggtcaa cgggtaaacgc
 360

<210> 266
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 266
 Xaa Tyr Gly Pro Gly Val Arg Met Asp Glu Gly Tyr His Ser Gly Met
 1 5 10 15
 Thr Val Pro Gly Ala Phe Asp Ser Leu Ile Gly Lys Leu Ile Ile Thr
 20 25 30
 Gly Asp Ser Arg Glu Gln Ala Leu Ala Arg Ala Arg Ala Leu Asp
 35 40 45
 Glu Ile Val Ile Asp Gly Met Pro Thr Val Ile Pro Phe His Gln Ala
 50 55 60
 Val Val His Asp Pro Ala Phe Thr Ala Ala Asp Gly Cys Phe Gly Val
 65 70 75 80
 Phe Thr Asp Trp Ile Glu Thr Glu Phe Asp Asn Lys Ile Glu Pro Tyr
 85 90 95
 Thr Gly Ser Leu Gly Glu Ser Ala Asn Ser Glu Pro Pro Arg Glu Val
 100 105 110
 Val Val Glu Val Asn Gly Lys Arg
 115 120

<210> 267
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 267
 natcctcaac gtgtgttcag ttccacgcga aagatcatgt tcgtcatcgg atcgatgccg
 60
 ttaacgcac ctagtcaatc caccgatggc gaccctggca aaaaatacga ggtgacttgg
 120

ctagatctcg ggcaccttca ccctagtcgg cggggactcg tcactatcac cacaactgtc
 180
 gatgatgacg tcatcacctc ttcccaggta aatgtcggca acctccaccg cggggatgaa
 240
 aaacttttgc aagctcgga ttacgcgacg attccgatgc ttgcatcacg tcatggctgg
 300
 acagctccat tcattggtga gaccggcgca gcccatgcca tcgaggatgc gatgggcatt
 360
 accatcccaa ctgcgtggc atggatacga accctgctcg ctgagttcag cagaatcacc
 420
 tcacacttca catttttgtc atgggtaggc catcactgtg atgatgccg c
 471

<210> 268

<211> 157

<212> PRT

<213> Homo sapiens

<400> 268

Xaa	Pro	Gln	Arg	Val	Phe	Ser	Ser	Thr	Arg	Lys	Ile	Met	Phe	Val	Ile
1				5				10					15		
Gly	Ser	Met	Pro	Leu	Thr	His	Pro	Ser	Gln	Ser	Thr	Asp	Gly	Asp	Pro
			20					25					30		
Gly	Lys	Lys	Tyr	Glu	Val	Thr	Trp	Leu	Asp	Leu	Gly	His	Leu	His	Pro
			35					40				45			
Ser	Arg	Pro	Gly	Leu	Val	Thr	Ile	Thr	Thr	Thr	Val	Asp	Asp	Asp	Val
			50				55				60				
Ile	Thr	Ser	Ser	Gln	Val	Asn	Val	Gly	Asn	Leu	His	Arg	Gly	Asp	Glu
				70					75					80	
Lys	Leu	Phe	Glu	Ala	Arg	Asp	Tyr	Arg	Gln	Ile	Pro	Met	Leu	Ala	Ser
				85					90					95	
Arg	His	Gly	Trp	Thr	Ala	Pro	Phe	Ile	Gly	Glu	Thr	Gly	Ala	Ala	His
			100					105					110		
Ala	Ile	Glu	Asp	Ala	Met	Gly	Ile	Thr	Ile	Pro	Thr	Arg	Val	Ala	Trp
			115					120					125		
Ile	Arg	Thr	Leu	Leu	Ala	Glu	Phe	Ser	Arg	Ile	Thr	Ser	His	Phe	Thr
			130				135					140			
Phe	Leu	Ser	Trp	Val	Gly	His	His	Cys	Asp	Asp	Ala	Gly			
145					150					155					

<210> 269

<211> 387

<212> DNA

<213> Homo sapiens

<400> 269

acgcgtgtcg tgtttccaga aaaaaccaat aaattagagt ttatggtaga agtgattgct
 60
 gatatgacgg taatcaatcc atttgatttc ttgtggaaa gctacgcaga agactaccaca
 120
 ttgtcttatg acaaaagtct taaaaaagag ttagaacctt atttacaggt tcttgaacct
 180
 tgttcgttac tcgacaaatg gctgtctggt gttgatcgtg aaaaaacacc gatcaatgat
 240

tttctagtcg caataaacag tcgccttgcc ggtgatattg gctatggat tcgcttagaa
 300
 ccggcgcttc agtcacctga agaaacgctc acattaatga aaggctcttg tcgcgatacc
 360
 tcgggggttat tgggtcaaat actacgc
 387

<210> 270

<211> 129

<212> PRT

<213> Homo sapiens

<400> 270

Thr	Arg	Val	Phe	Pro	Glu	Lys	Thr	Asn	Lys	Leu	Glu	Phe	Met	Val
1			5					10					15	
Glu	Val	Ile	Ala	Asp	Met	Thr	Val	Ile	Asn	Pro	Phe	Asp	Phe	Val
			20					25				30		
Glu	Ser	Tyr	Ala	Glu	Asp	Tyr	Pro	Phe	Ala	Tyr	Asp	Lys	Ala	Leu
			35				40				45			
Lys	Glu	Leu	Glu	Pro	Tyr	Leu	Gln	Val	Ser	Glu	Pro	Cys	Ser	Leu
	50				55					60				
Asp	Lys	Trp	Leu	Ser	Gly	Val	Asp	Arg	Glu	Lys	Thr	Pro	Ile	Asn
65				70					75				80	
Phe	Leu	Val	Ala	Ile	Asn	Ser	Arg	Leu	Ala	Gly	Asp	Ile	Gly	Tyr
			85					90				95		
Ile	Arg	Leu	Glu	Pro	Gly	Val	Gln	Ser	Pro	Glu	Glu	Thr	Leu	Thr
			100				105					110		
Met	Lys	Gly	Ser	Cys	Arg	Asp	Thr	Ser	Gly	Leu	Leu	Val	Gln	Ile
		115					120					125		

Arg

<210> 271

<211> 443

<212> DNA

<213> Homo sapiens

<400> 271

gccggcacca acgaaagtc ctctaccgag cgcgatggcg attcgctttt gcgtgccttc
 60
 caccgccgag tgggtttggt aaccagccca cacctgcagc gcgttactga gcgcacggc
 120
 attgatggcc agccattca cccgcgcgat tatgtacga tctggcacga gattaagcca
 180
 tttgtgaaa tggtcgatgc cgaatcggac gtgcctatgt ctaagtctga ggtcttcgtg
 240
 ggcctgtcct atgctgcgtt tgccgacgcc cccggggacg tcgctgtcgt cgaagtcggc
 300
 cttggcggac gttgggacgc taccaatgtg gtcaacgcgg atgtctctgt cattacccgc
 360
 gtgggcatgg accacacgga ttacctgggg gagacgatga ctgaaatcgc aggcgagaaa
 420
 gctggcatta ttaagccacg cgt
 443

<210> 272

<211> 147

<212> PRT

<213> Homo sapiens

<400> 272

```

Ala Gly Thr Asn Gly Lys Ser Ser Thr Ala Arg Met Val Asp Ser Leu
 1           5           10           15
Leu Arg Ala Phe His Arg Arg Val Gly Leu Val Thr Ser Pro His Leu
      20           25           30
Gln Arg Val Thr Glu Arg Ile Gly Ile Asp Gly Gln Pro Ile His Pro
      35           40           45
Arg Asp Tyr Val Arg Ile Trp His Glu Ile Lys Pro Phe Val Glu Met
      50           55           60
Val Asp Ala Glu Ser Asp Val Pro Met Ser Lys Phe Glu Val Phe Val
      65           70           75           80
Gly Leu Ser Tyr Ala Ala Phe Ala Asp Ala Pro Gly Asp Val Ala Val
      85           90           95
Val Glu Val Gly Leu Gly Gly Arg Trp Asp Ala Thr Asn Val Val Asn
      100          105          110
Ala Asp Val Ser Val Ile Thr Pro Val Gly Met Asp His Thr Asp Tyr
      115          120          125
Leu Gly Glu Thr Ile Thr Glu Ile Ala Gly Glu Lys Ala Gly Ile Ile
      130          135          140
Lys Pro Arg
145

```

<210> 273

<211> 864

<212> DNA

<213> Homo sapiens

<400> 273

```

caaagtaaga ctgcttcaaa ttttgtgttc tgctctgcag ctgcctcccc cctgctgtcg
60
aagagaagcc aaagccccc cccccaccct caaaggctcg gaagtctggc atccctactt
120
ccgagcctgg atcccagtaa ggatcttgcc ctccctgcaa caccgagtgc ctagacagc
180
tgctgcctga gaaactggcct ccagccgggtg tectcattcc atggggctcc ctgctgactg
240
catttcttga tctgggatga tgtttaccag cccaaaacca gtcatgttct tccaaaagct
300
tctctttgat agaattttga ggccatgcc cctcccttcc agtccacatg gaattccaga
360
atcagtcaca gcctctgatt tttccaaga agagattgcc ttcaccattg ttaaatgtca
420
gcctgtacgg cagagacatg gtggtctgca caagcctgga caagttcttc catattgatg
480
gtgggagcaa cccctgtaat ctactccttg gaaggatttt ttgctttgct tatgaaaagc
540
tgctgcttgag acttaggtac ttttctcacg tggacacact gatcccatcc catattgcac
600

```

ctttgaagag atggatatca agtacacttt ggtagctgaa ataatcatat ctttctgatg
 660
 tctattgtat ctcccttgag gaaaagaaca cacattttta atggagattg gctgctttca
 720
 ggtagtggtg tctatcattg aaagagcatg gactcaaaca tcagccctga gttcttgagt
 780
 ccacccaact cccatcttct tgtggcacag gaaagctgcc ctctccctct cccaccacac
 840
 tcctgactaa tgcccttcac gcgt
 864

<210> 274
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 274
 Met Trp Thr Gly Arg Glu Val Ala Trp Pro Gln Asn Ser Ile Lys Glu
 1 5 10 15
 Lys Leu Leu Glu His Asp Trp Phe Trp Ala Gly Lys His His Pro
 20 25 30
 Arg Ser Gly Asn Ala Val Ser Arg Glu Pro His Gly Met Arg Thr Pro
 35 40 45
 Ala Gly Gly Gln Phe Ser Gly Ser Ser Cys Leu Arg His Ser Val Leu
 50 55 60
 Gln Gly Gly Gln Asp Pro Tyr Trp Asp Pro Gly Ser Glu Val Gly Met
 65 70 75 80
 Pro Asp Phe Arg Ala Phe Glu Val Gly Gly Gly Gly Phe Gly Phe Ser
 85 90 95
 Ser Thr Ala Gly Gly Ser Glu Leu Gln Ser Arg Thr Gln Asn Leu Lys
 100 105 110
 Gln Ser Tyr Phe
 115

<210> 275
 <211> 911
 <212> DNA
 <213> Homo sapiens

<400> 275
 naaatttaaa ggaacctccc ttctataacy gagagtattt attgcagett tcctttctgt
 60
 ttattttcag gaatgaaagg aattaccag cttctgctt ttatacctac agctgaaagt
 120
 aattcctttc agcctcaggt gaagactttg ccatctccaa ttgatgctaa acagcagttg
 180
 caacggaaaa tccagaagaa gcagcaagaa cagaaactac aatccccctt gccaggagaa
 240
 tctgcagcaa aaaagtacaga aagtgtctaca agcaatggag tgactaatct tcctaattga
 300
 aatccttcaa tcctttctcc tcaacctatt ggtatcggtg tggcagctgt ccctagtccc
 360
 attccggctc agcggactag gcaattggta acttcaccga gtccaatgag ttcttctnga
 420

cggcaaaagt cttccctca atgtacaggt ggtcactcag cacatgcagt ctgtgaaaca
 480
 ggcaccaaaag actcccccaga acgttccagc agtcctggtg ggaatcggtc tgcccgccac
 540
 cgttaccctc agatcttacc caaaccagcg aacaccagtg cactcaccat tcgctctcca
 600
 actactgtcc tctttactag tagtcccatc aaaactgtgt ttgtaccgcg ttcacacatg
 660
 agttctctaa atgtggtgaa aatgacaaca atatccctca caccagcaa cagtaacacc
 720
 cctcttaaac attctgcctc agtcagcagt gctacaggaa caacagaaga atcaaggagt
 780
 gttccacaga tcaagaatgg ttctgtcgtg tcgcttcagt ctctcgggtc caggagcagc
 840
 agtgcggggg gaacatctgc tgtggaagtc aaagtggaac ccgaaacatc atcagatgag
 900
 catcctgtac a
 911

<210> 276

<211> 279

<212> PRT

<213> Homo sapiens

<400> 276

Met Lys Gly Ile Thr Gln Pro Ser Ala Phe Ile Pro Thr Ala Glu Ser
 1 5 10 15
 Asn Ser Phe Gln Pro Gln Val Lys Thr Leu Pro Ser Pro Ile Asp Ala
 20 25 30
 Lys Gln Gln Leu Gln Arg Lys Ile Gln Lys Lys Gln Gln Glu Gln Lys
 35 40 45
 Leu Gln Ser Pro Leu Pro Gly Glu Ser Ala Ala Lys Lys Ser Glu Ser
 50 55 60
 Ala Thr Ser Asn Gly Val Thr Asn Leu Pro Asn Gly Asn Pro Ser Ile
 65 70 75 80
 Leu Ser Pro Gln Pro Ile Gly Ile Val Val Ala Ala Val Pro Ser Pro
 85 90 95
 Ile Pro Val Gln Arg Thr Arg Gln Leu Val Thr Ser Pro Ser Pro Met
 100 105 110
 Ser Ser Ser Xaa Arg Gln Ser Ser Pro Gln Cys Thr Gly Gly His
 115 120 125
 Ser Ala His Ala Val Cys Glu Thr Gly Thr Lys Asp Ser Pro Glu Arg
 130 135 140
 Ser Ser Ser Pro Gly Gly Asn Arg Ser Ala Arg His Arg Tyr Pro Gln
 145 150 155 160
 Ile Leu Pro Lys Pro Ala Asn Thr Ser Ala Leu Thr Ile Arg Ser Pro
 165 170 175
 Thr Thr Val Leu Phe Thr Ser Ser Pro Ile Lys Thr Ala Val Val Pro
 180 185 190
 Ala Ser His Met Ser Ser Leu Asn Val Val Lys Met Thr Thr Ile Ser
 195 200 205
 Leu Thr Pro Ser Asn Ser Asn Thr Pro Leu Lys His Ser Ala Ser Val
 210 215 220
 Ser Ser Ala Thr Gly Thr Thr Glu Glu Ser Arg Ser Val Pro Gln Ile

```

225                230                235                240
Lys Asn Gly Ser Val Val Ser Leu Gln Ser Pro Gly Ser Arg Ser Ser
                245                250                255
Ser Ala Gly Gly Thr Ser Ala Val Glu Val Lys Val Glu Pro Glu Thr
                260                265                270
Ser Ser Asp Glu His Pro Val
                275

```

```

<210> 277
<211> 652
<212> DNA
<213> Homo sapiens

```

```

<400> 277
nnaccggtgg ggaactctgc tgaggtcctt aatggccctt ctctgtctcc ggacggcacc
60
atgaaccttg ttggtgggct gcgtcaggca atggccacca ctggttactc ggaggtcaaa
120
gagttccagc gcattcgagct gacgattctc taaccgttcc accacgcaga atggtgttcc
180
ggtgagcggg tggatagcta gccttcggcc atgagtgaag tgcccgatga attggtctgt
240
ttgcgtggcg cgattgacaa catggacgcc gccctcatcc atctgcttgc cgaagagttc
300
cggattactc gcgaggtagg ccgcctcaag gcggagtgcg gtttacctcc ggccgacccc
360
gcccgtaggg ctgagcagat cgcgcggttg cggcagttag cggtcgagtc gaacctcgac
420
cccgaattcg cgcagaaggt catcacgttc atcgtggccg aggtgggtgcg tcaccacgaa
480
gctattctgt acgattcttg cgacgactct ggagtgccgg atacggggga ggcggatgtc
540
cctgggtcgg gcagctgagt tacagatcag gcgatgacgt cgcctcgttg caccttcgac
600
gggattccga cgacgactgt gccgggggcg acatccttga cgaccaacgc gt
652

```

```

<210> 278
<211> 115
<212> PRT
<213> Homo sapiens

```

```

<400> 278
Met Ser Glu Val Pro Asp Glu Leu Val Val Leu Arg Gly Ala Ile Asp
1      5      10      15
Asn Met Asp Ala Ala Leu Ile His Leu Leu Ala Glu Arg Phe Arg Ile
20     25     30
Thr Arg Glu Val Gly Arg Leu Lys Ala Glu Cys Gly Leu Pro Ala
35     40     45
Asp Pro Ala Arg Glu Ala Glu Gln Ile Ala Arg Leu Arg Gln Leu Ala
50     55     60
Val Glu Ser Asn Leu Asp Pro Glu Phe Ala Gln Lys Val Ile Thr Phe
65     70     75     80
Ile Val Ala Glu Val Val Arg His His Glu Ala Ile Ala Asp Asp Ser

```



```

      85          90          95
Gly Asp Asp Ser Gly Val Ala Asp Thr Gly Glu Ala Asp Val Pro Gly
      100          105          110
Ser Gly Ser
      115

```

<210> 279
 <211> 348
 <212> DNA
 <213> Homo sapiens

```

<400> 279
cgggagggtca cacaagcatt caaacatag cagatggtaa atgttatgtt atgtgtattt
60
taccacaatc cttaaaaaga aaagaaagaa aggcataatg aacccctagt tacctctcat
120
ccagcttcaa aattgtcagt gcatgggtcaa tcttgtctta tctgcccttc acccaccctt
180
ttccagaaag aagaccaga ggattccaca tctgcctgga aaccacgacc agtctcgact
240
ggaagtgtgt gttaatgttg catgtattca taaaacctct aggcatttct agtgcctctc
300
agaatttttc caaattcagg caaacacaga aattacttcc aaaaattt
348

```

<210> 280
 <211> 99
 <212> PRT
 <213> Homo sapiens

```

<400> 280
Met Cys Ile Leu Pro Gln Ser Leu Lys Arg Lys Glu Arg Lys Ala Tyr
1          5          10          15
Gly Thr Pro Ser Tyr Leu Ser Ser Ser Phe Lys Ile Val Ser Ala Trp
          20          25          30
Ser Ile Leu Ser Tyr Leu Pro Leu Thr His Pro Phe Pro Glu Arg Arg
          35          40          45
Pro Arg Gly Phe His Ile Cys Leu Glu Thr Thr Thr Ser Leu Asp Trp
          50          55          60
Lys Leu Leu Leu Met Leu His Val Phe Ile Lys Pro Leu Gly Ile Ser
65          70          75          80
Ser Val Pro Gln Asn Phe Ser Lys Phe Arg Gln Thr Gln Lys Leu Leu
          85          90          95
Pro Lys Ile

```

<210> 281
 <211> 384
 <212> DNA
 <213> Homo sapiens

```

<400> 281
agatctgcgc agatcgataa tggattaaag actcttgacy ctggagtcac cgagatgaac
60

```

aacaagggtg tgggggcaac gaaggctgtc ggtgattcca ccactaccgt caaccagggtg
 120
 aattctcgct taggaantgc cgactcagcg gcagagaaga cgctcgagcg cgttactcag
 180
 acgcgcgtgg gtgccacggc gattaccggc gctgctcaaa atgcatggcg tgattcccaa
 240
 gctgtcaact cagccatggt tccgcttatt aataacgtga caaagaatct tcttaccttg
 300
 caaaaacagg ccaggaatct cgtgtcagtg aacggtaccc tgcagaaccc caacggtgat
 360
 tctgtcatta agattcaaca gacc
 384

<210> 282

<211> 110

<212> PRT

<213> Homo sapiens

<400> 282

Met	Asn	Asn	Lys	Val	Leu	Gly	Ala	Thr	Lys	Ala	Val	Gly	Asp	Ser	Thr
1				5					10					15	
Thr	Thr	Val	Asn	Gln	Val	Asn	Ser	Ala	Leu	Gly	Xaa	Ala	Asp	Ser	Ala
			20					25					30		
Ala	Glu	Lys	Thr	Ser	Ser	Ala	Val	Thr	Gln	Thr	Arg	Val	Gly	Ala	Gln
			35					40					45		
Ala	Ile	Thr	Gly	Ala	Ala	Gln	Asn	Val	Met	Ala	Asp	Ser	Gln	Ala	Val
	50					55				60					
Asn	Ser	Ala	Met	Val	Pro	Leu	Ile	Asn	Asn	Val	Thr	Lys	Asn	Leu	Pro
	65				70					75				80	
Thr	Leu	Gln	Lys	Gln	Ala	Arg	Asn	Leu	Val	Ser	Val	Asn	Gly	Thr	Leu
				85					90					95	
Gln	Asn	Pro	Asn	Gly	Asp	Ser	Val	Ile	Lys	Ile	Gln	Gln	Thr		
			100					105					110		

<210> 283

<211> 426

<212> DNA

<213> Homo sapiens

<400> 283

cgctgagacc aatgtgagac ggccgtcacc aaggcgatgc gcgacaagtc gggttggtagc
 60
 ggaccggata ttgtgcgtcg cgagctgcgc catgtcgtga cgagcggcac gattgtcgat
 120
 ggaagcgtac tggctgacga attgagcagc tactgcatga gtatcaagga gcacgtccgc
 180
 tctgatggcc tatccgagtt tggcatctgc accctcgacg ccgccaccgc cgagttccga
 240
 tacatgacat tcgtcgacga tgccgtgctg tcacaactcg agacattgct gcgtttctta
 300
 cgcatcaagg aagctcttgca tgaaaaagg gtcattgtgc cttccacgct gcgcttgatc
 360
 cgcaacgcgg tgcccaccac ctgccaaatt accatgctca agcctgatac cgaattgtcg
 420

gagaga
426

<210> 284
<211> 142
<212> PRT
<213> Homo sapiens

<400> 284
Arg Val Asp Gln Cys Glu Thr Ala Val Thr Lys Gly Met Arg Asp Lys
1 5 10 15
Ser Val Gly Ser Gly Pro Asp Ile Val Arg Arg Glu Leu Arg His Val
20 25 30
Val Thr Ser Gly Thr Ile Val Asp Gly Ser Val Leu Ala Asp Glu Leu
35 40 45
Ser Ser Tyr Cys Met Ser Ile Lys Glu His Val Arg Ser Asp Gly Leu
50 55 60
Ser Glu Phe Gly Ile Cys Thr Leu Asp Ala Ala Thr Ala Glu Phe Arg
65 70 75 80
Tyr Met Thr Phe Val Asp Asp Ala Val Leu Ser Gln Leu Glu Thr Leu
85 90 95
Leu Arg Ser Leu Arg Ile Lys Glu Val Leu His Glu Lys Gly Val Met
100 105 110
Leu Pro Ser Thr Leu Arg Leu Ile Arg Asn Ala Val Pro Thr Thr Cys
115 120 125
Gln Ile Thr Met Leu Lys Pro Asp Thr Glu Leu Ser Glu Arg
130 135 140

<210> 285
<211> 345
<212> DNA
<213> Homo sapiens

<400> 285
acgcgtgcag tcccttaccg acatgctggc agatgagctc gacggcagcc gcttcaccgg
60
cgattttcca gaaatctaca aacgtcagaa ctgcgatcttc ggcgatgtaa ggaataactt
120
ttacaaaaaa ggataccgca tcatcaacgt agcgaatggg gtatttcgcga agatttcact
180
ggtaagcgca ggcaatgcag acaatgtgaa aggtcaggcc ctgtttcttc gccgtgtggc
240
gcatttcgaa ctgcgtgcgt tgtttgcaca accctggggg tatacttcgg acaattcaca
300
ctacggcatc ccgctccgca atgaaatcgt aattggttct attcn
345

<210> 286
<211> 107
<212> PRT
<213> Homo sapiens

<400> 286
Met Leu Ala Asp Glu Leu Asp Gly Ser Arg Phe Thr Gly Asp Phe Ser

1	5	10	15
Glu Ile Tyr	Lys Arg Gln Asn Ser	Ile Phe Gly Asp Val Arg Asn Asn	
	20	25	30
Phe Tyr Lys	Lys Gly Tyr Arg Ile	Ile Asn Val Ala Asn Gly Val Leu	
	35	40	45
Arg Lys Ile	Ser Leu Val Ser Ala Gly Asn Ala Asp Asn Val Lys Gly		
	50	55	60
Gln Ala Leu	Phe Phe Arg Gly Val Ala His Phe Glu Leu Val Arg Leu		
	65	70	75
Phe Ala Gln	Pro Trp Gly Tyr Thr Ser Asp Asn Ser His Tyr Gly Ile		
	85	90	95
Pro Leu Arg	Asn Glu Ile Val Ile Gly Ser Ile		
	100	105	

<210> 287

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 287

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nnntaaactgc ccctttgcag tctttattct gggacattag cactgtctgg ttatcttgct
60
tcagttgagg gattcgggac aatagcagtg ctgatggtaa tggttggcat ttccctgttt
120
gttttgcagg tcacggccag gggctttggg ccgctgttac agtttgcccta cactgccaaag
180
ctgttaactca gcagagaaaa catccgcgag gtcatccgct gtgctgagtt cctgcgcatg
240
cacaacactgg aggactcctg cttcagcttc ctgcagacc ccgctcctgaa cagtggaggat
300
ggcctgtttg tgtgccggaa ggatgctgctg tgccagcgcc cacacaggga ctgcgagaac
360
tctgcaggag aggaggagga tgaagaggag gagacgatgg attcagagac ggccaagatg
420
gcttgcccca gggaccagat gcttccagag cccatcagct ttgaggccgc cgccatcccc
480
gtagcagaga aggaagaagc cctgctgccc gagcctgacg tgcccacaga caccaaggag
540
agctcagaaa aggacgcgtt aacgcagtac ccagatata agaaatacca gcttgcagtg
600
accaagaatg tctataatgc atcatcacac agtacctcag gttttgcaag cacattccgg
660
gaagataact ctagcaacag cctcaagccg gggcttgcca gggggcagat taaaagttag
720
ccgcccagtg aagagaatga ggaagagagc atcacgctct gcctgtctgg agatgagcct
780
gacgccaaag acagagcggg ggaatgtcag atggaccgga aacagcccag ccctgccccct
840
acccccacgg cccagctgg ggcgcgctgc ctggagagat ccaggagcgt ggcctcgccc
900
tcctgcttaa ggtctctgtt cagcataacg aaaagtgtgg agctgtctgg cctgccagat
960
acatctcagc agcactttgc caggagtcca gcctgccctt ttgacaaggg gatcactcag
1020

```

ggtgacctta aaactgacta caccctcttc acagggaatt atggacagcc ccacgtgggc
 1080
 cagaaggagg tgtccaactt caccatgggg tcgccccca gggggcctgg gttggaggct
 1140
 ctctgtaaac aggagggaga gctggaccgg aggagcgtga tcttctcttc cagcgcttgc
 1200
 gaccaagtga gcacctcggg gcattcttat tctgggggtga gcagtttga caaagacctc
 1260
 tctgagccgg tgccaaaggg tctgtgggtg ggagccggcc agtccctccc cagctcgag
 1320
 gcctactccc acggtgggct gatggccgac cacttgccag gaaggatgcg gcccaacac
 1379

<210> 288

<211> 428

<212> PRT

<213> Homo sapiens

<400> 288

Met Val Met Leu Ala Ile Ser Leu Phe Val Leu Gln Val Thr Ala Arg
 1 5 10 15
 Gly Phe Gly Pro Leu Leu Gln Phe Ala Tyr Thr Ala Lys Leu Leu Leu
 20 25 30
 Ser Arg Glu Asn Ile Arg Glu Val Ile Arg Cys Ala Glu Phe Leu Arg
 35 40 45
 Met His Asn Leu Glu Asp Ser Cys Phe Ser Phe Leu Gln Thr Gln Leu
 50 55 60
 Leu Asn Ser Glu Asp Gly Leu Phe Val Cys Arg Lys Asp Ala Ala Cys
 65 70 75 80
 Gln Arg Pro His Glu Asp Cys Glu Asn Ser Ala Gly Glu Glu Glu Asp
 85 90 95
 Glu Glu Glu Glu Thr Met Asp Ser Glu Thr Ala Lys Met Ala Cys Pro
 100 105 110
 Arg Asp Gln Met Leu Pro Glu Pro Ile Ser Phe Glu Ala Ala Ala Ile
 115 120 125
 Pro Val Ala Glu Lys Glu Glu Ala Leu Leu Pro Glu Pro Asp Val Pro
 130 135 140
 Thr Asp Thr Lys Glu Ser Ser Glu Lys Asp Ala Leu Thr Gln Tyr Pro
 145 150 155 160
 Arg Tyr Lys Lys Tyr Gln Leu Ala Cys Thr Lys Asn Val Tyr Asn Ala
 165 170 175
 Ser Ser His Ser Thr Ser Gly Phe Ala Ser Thr Phe Arg Glu Asp Asn
 180 185 190
 Ser Ser Asn Ser Leu Lys Pro Gly Leu Ala Arg Gly Gln Ile Lys Ser
 195 200 205
 Glu Pro Pro Ser Glu Glu Asn Glu Glu Glu Ser Ile Thr Leu Cys Leu
 210 215 220
 Ser Gly Asp Glu Pro Asp Ala Lys Asp Arg Ala Gly Asp Val Glu Met
 225 230 235 240
 Asp Arg Lys Gln Pro Ser Pro Ala Pro Thr Pro Thr Ala Pro Ala Gly
 245 250 255
 Ala Ala Cys Leu Glu Arg Ser Arg Ser Val Ala Ser Pro Ser Cys Leu
 260 265 270
 Arg Ser Leu Phe Ser Ile Thr Lys Ser Val Glu Leu Ser Gly Leu Pro

275	280	285
Ser Thr Ser Gln Gln His Phe Ala Arg Ser Pro Ala Cys Pro Phe Asp		
290	295	300
Lys Gly Ile Thr Gln Gly Asp Leu Lys Thr Asp Tyr Thr Pro Phe Thr		
305	310	315
Gly Asn Tyr Gly Gln Pro His Val Gly Gln Lys Glu Val Ser Asn Phe		
325	330	335
Thr Met Gly Ser Pro Leu Arg Gly Pro Gly Leu Glu Ala Leu Cys Lys		
340	345	350
Gln Glu Gly Glu Leu Asp Arg Arg Ser Val Ile Phe Ser Ser Ser Ala		
355	360	365
Cys Asp Gln Val Ser Thr Ser Val His Ser Tyr Ser Gly Val Ser Ser		
370	375	380
Leu Asp Lys Asp Leu Ser Glu Pro Val Pro Lys Gly Leu Trp Val Gly		
385	390	395
Ala Gly Gln Ser Leu Pro Ser Ser Gln Ala Tyr Ser His Gly Gly Leu		
405	410	415
Met Ala Asp His Leu Pro Gly Arg Met Arg Pro Asn		
420	425	

<210> 289

<211> 822

<212> DNA

<213> Homo sapiens

<400> 289

```

ngcattaccg ggctgaagac ggggtgctcat gacctcaacg ataataggcta ttgctagaac
60
cacgccggcc caccgccgcg aaagcgcaga caccggcacca ggaggggtgta catgggtgat
120
agcaagtcga aggcgaagga cgagcgcact gccgatgaga tcaggcggga tattgcagcg
180
accctgctct gcctggcagc cgggggtggag aacctcgtgg agggaggtgca tccggcaacc
240
ctcaagcgtg aagcatctga tcgtgcccgt gattttgtgc aggggtgagtt tgatcaggtc
300
aagagccagg tcaaatgata gaaatgggtg gcgctgcagc ggatcgcgat ggccgcagga
360
gtgctcgctg ccgpcgtcgt cagcattatt gtgctgcgcg cgatagtcgg tcgpcgcaacg
420
ggcgcctacc ctgctcgcaa gcttgagaag ctgcagcttt ctacggcgaa gcggggttcga
480
aaagatgcca agcagcgtag taaggaagat gaaaaggcag ccaagaaaaa tgccaagctc
540
ggcaagaaga acgctaagaa gtacggcaag ctcgataccg atgactcgtc ggtaagcaac
600
cttgccgaga aaatgctcaa acaggccgcc gtgctgcgtg cacaggcggc tgccggggcg
660
tgagaacagt gccgcctagc aaacagcggg cacagcgcaa aacaggtttg gtcctcgacc
720
atggtggacc ggagccaaac tgtgttaccg catcatttga taccgccagc agccaggcct
780
gcgacaatgc gacgctggaa taccagcacc atgatgacta gt
822

```

<210> 290
 <211> 183
 <212> PRT
 <213> Homo sapiens

<400> 290
 Met Ala Asp Ser Lys Ser Lys Ala Lys Asp Glu Arg Thr Ala Asp Glu
 1 5 10 15
 Ile Arg Arg Asp Ile Ala Ala Thr Arg Ala Cys Leu Ala Ala Gly Val
 20 25 30
 Glu Asn Leu Val Glu Glu Val His Pro Ala Thr Leu Lys Arg Glu Ala
 35 40 45
 Ser Asp Arg Ala Arg Asp Phe Val Gln Gly Glu Phe Asp Gln Val Lys
 50 55 60
 Ser Gln Val Lys Asp Glu Lys Trp Trp Arg Val Gln Arg Ile Ala Met
 65 70 75 80
 Ala Ala Gly Val Leu Ala Ala Gly Val Val Ser Ile Ile Val Leu Arg
 85 90 95
 Ala Ile Val Gly Arg Ala Thr Gly Ala Thr Ala Arg Arg Lys Leu Glu
 100 105 110
 Lys Leu Gln Leu Ser Gln Ala Lys Arg Val Arg Lys Asp Ala Lys Gln
 115 120 125
 Arg Ser Lys Glu Asp Glu Lys Ala Ala Lys Lys Asn Ala Lys Leu Gly
 130 135 140
 Lys Lys Asn Ala Lys Lys Tyr Gly Lys Leu Asp Thr Asp Asp Ser Ser
 145 150 155 160
 Val Ser Asn Leu Ala Glu Lys Met Leu Lys Gln Ala Ala Val Leu Arg
 165 170 175
 Ala Gln Ala Ala Ala Gly Ala
 180

<210> 291
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 291
 ctccacgccc acaagactta cgacgggcgt cgctgccggg ctgagtgccg ggcggctcc
 60
 atcaccccc gcacgctcgc ccgcggcggtg gagaccagcg agcgcttggg ccgggtatcgc
 120
 tgggtcgtcg agcgcacett cgctggctc aaccgctttc ggcgctcgc catccgctac
 180
 gagcggcggtg ctgacatcca cgaagccttc gtgacccctg gctgcgcct catctgcctc
 240
 aaccagatca gacgggtttt ttaggtgctg taaagggaga atggctgcag ctgggctatc
 300
 tgctccctcg tcaaccagaa acaggctgct catcctcact caacaacgcg t
 351

<210> 292
 <211> 87
 <212> PRT

<213> Homo sapiens

<400> 292

```

Leu His Ala Asp Lys Thr Tyr Asp Gly Arg Arg Cys Arg Ala Glu Cys
 1             5             10             15
Arg Ala Arg Ser Ile Thr Pro Arg Ile Ala Arg Arg Gly Val Glu Thr
      20             25             30
Ser Glu Arg Leu Gly Arg Tyr Arg Trp Val Val Glu Arg Thr Phe Ala
 35             40             45
Trp Leu Asn Arg Phe Arg Arg Leu Ala Ile Arg Tyr Glu Arg Arg Ala
 50             55             60
Asp Ile His Glu Ala Phe Val Ile Leu Gly Cys Ala Leu Ile Cys Leu
 65             70             75             80
Asn Gln Ile Arg Arg Phe Cys
      85

```

<210> 293

<211> 716

<212> DNA

<213> Homo sapiens

<400> 293

```

nncttcacca caccggccat caacgcacct cctcgtgata acttgacctt ctgccgaacc
 60
ggttaatcag tttagtggcg aggcattgaca cgttgacgag tcagctgtgg tacatgtgcg
120
gaacactcac aatgccacgg cggcattgtg ctgtcgggtca cgacccttat ggtgatcgct
180
gtgagaaccc gaacggcaga tgcgattctg cgggcacttg atctgaacag gtttaagggt
240
gcgaagacct tcgatgttcc agtggtgcgc atagctgggt cggggacagg taaaactcgt
300
gctgtcactc atcgatttgc ctacgggtgca gcgacaggca agcttgatcc gcgtcgtacc
360
ctcgcgttca cttttacgac taaggcagct ggcacgatga gaggtcgact cgccgatctg
420
ggggttggtg gtgtgcaggc tcgcactatt cattctgcgg cgttgccgga gatcaagttt
480
ttctggcctc gtgcataata ctgtgagttg ccaccgggtga gtgattctcg tttctcgatg
540
gtggcggaga cgaccatcgc cattggtctg ggcaatgaca aggcgtgtgt gcgcgacttg
600
tcgcggcaga tctcgtgggc gaagggtctca aatgtgccga ctgatcaata cgcattccctg
660
gctagggcgg aaggtcgggt ggtggcgggga gtttcggcaa ctgacgtagg acgcgt
716

```

<210> 294

<211> 190

<212> PRT

<213> Homo sapiens

<400> 294

```

Met Leu Leu Ser Val Thr Thr Leu Met Val Ile Ala Val Arg Thr Arg

```



```

      1             5             10             15
Thr Ala Asp Ala Ile Leu Ala Ala Leu Asp Leu Asn Arg Phe Lys Val
      20
Ala Lys Thr Phe Asp Val Pro Val Cys Val Ile Ala Gly Ala Gly Thr
      35             40             45
Gly Lys Thr Arg Ala Val Thr His Arg Ile Ala Tyr Gly Ala Ala Thr
      50             55             60
Gly Lys Leu Asp Pro Arg Arg Thr Leu Ala Val Thr Phe Thr Thr Lys
      65             70             75             80
Ala Ala Gly Thr Met Arg Gly Arg Leu Ala Asp Leu Gly Val Val Gly
      85             90             95
Val Gln Ala Arg Thr Ile His Ser Ala Ala Leu Arg Gln Ile Lys Phe
      100             105             110
Phe Trp Pro Arg Ala Tyr Asn Cys Glu Leu Pro Pro Val Ser Asp Ser
      115             120             125
Arg Phe Ser Met Val Ala Glu Thr Thr His Arg Ile Gly Leu Gly Asn
      130             135             140
Asp Lys Ala Leu Leu Arg Asp Leu Ser Ala Glu Ile Ser Trp Ala Lys
      145             150             155             160
Val Ser Asn Val Pro Thr Asp Gln Tyr Ala Ser Leu Ala Arg Ala Glu
      165             170             175
Gly Arg Val Val Ala Gly Val Ser Ala Thr Asp Val Gly Arg
      180             185             190

```

<210> 295

<211> 417

<212> DNA

<213> Homo sapiens

<400> 295

```

ttcatatcag gcagtagcccg agtccatgcg atcaacaacg tcagcgatc tttcacccat
60
tctggagatgc acctttctcat gggagaaaagc ggatcaggaa aaagcaccct catcaatctc
120
ctagctggtc tggatacccc agattcgggg tccgtctacg cagaaggcgt caccgtatct
180
gatcagagcg aggcgagcag agcccaattt cgattacgcc acatcgccgt catcttccag
240
gacgacaacc tcatcgctga gttgaccaat accgagaata ttgcgctacc cctgtgggcg
300
caggggcacat cgaagtccga tgccactgaa atcgcccacg aagccatgcg aaaactagga
360
atcgagtcac tgggcagacg ctaccccggc gaggtctcgt gtggccaacg gcaacgc
417

```

<210> 296

<211> 139

<212> PRT

<213> Homo sapiens

<400> 296

```

Phe Ile Ser Gly Ser Thr Arg Val His Ala Ile Asn Asn Val Ser Val
1             5             10             15
Ser Phe Thr His Ser Gly Val His Leu Leu Met Gly Glu Ser Gly Ser

```

```

                20                25                30
Gly Lys Ser Thr Leu Ile Asn Leu Leu Ala Gly Leu Asp Thr Pro Asp
      35                40                45
Ser Gly Ser Val Tyr Ala Glu Gly Val Thr Val Ser Asp Gln Ser Glu
      50                55                60
Ala Ser Arg Ala Gln Phe Arg Leu Arg His Ile Ala Val Ile Phe Gln
      65                70                75
Asp Asp Asn Leu Ile Ala Glu Leu Thr Asn Thr Glu Asn Ile Ala Leu
      85                90                95
Pro Leu Trp Ala Gln Gly Thr Ser Lys Ser Asp Ala Thr Glu Ile Ala
      100               105               110
His Glu Ala Met Arg Lys Leu Gly Ile Glu Ser Leu Gly Arg Arg Tyr
      115               120               125
Pro Gly Glu Val Ser Gly Gly Gln Arg Gln Arg
      130               135

```

<210> 297

<211> 378

<212> DNA

<213> Homo sapiens

<400> 297

```

tacaccatcg gtgaccagat tgtcgaagct ctgcagggtgc actcgaagat gtccgacaag
60
gacgcttggg cgcgtgccat cgagctgctc gacttggtgg ggattccgaa tcccgagggtg
120
cgtgccaaag cttttccgca cgagttttcc ggtggcatga ggcaacgagt cgtcatcgcc
180
atggccatcg cgaacgaccc tgacctatc atcgccgacg agccgacgac ggccctcgac
240
gtgaccatcc agggccagat tctcgatttg ctgcgcgtag cccagcgtga aacccatgcg
300
ggcgtcgtta tgatcaccca cgacctcggt gtggtagctg gtctggctga caggggtggc
360
gtgatgtatg cgggacgc
378

```

<210> 298

<211> 126

<212> PRT

<213> Homo sapiens

<400> 298

```

Tyr Thr Ile Gly Asp Gln Ile Val Glu Ala Leu Gln Val His Ser Lys
  1         5         10        15
Met Ser Asp Lys Asp Ala Trp Ala Arg Ala Ile Glu Leu Leu Asp Leu
      20        25        30
Val Gly Ile Pro Asn Pro Glu Val Arg Ala Lys Ala Phe Pro His Glu
      35        40        45
Phe Ser Gly Gly Met Arg Gln Arg Val Val Ile Ala Met Ala Ile Ala
      50        55        60
Asn Asp Pro Asp Leu Ile Ile Ala Asp Glu Pro Thr Thr Ala Leu Asp
      65        70        75        80
Val Thr Ile Gln Ala Gln Ile Leu Asp Leu Arg Val Ala Gln Arg

```

```

      85              90              95
Glu Thr His Ala Gly Val Val Met Ile Thr His Asp Leu Gly Val Val
      100              105              110
Ala Gly Leu Ala Asp Arg Val Ala Val Met Tyr Ala Gly Arg
      115              120              125

```

<210> 299
 <211> 368
 <212> DNA
 <213> Homo sapiens

```

<400> 299
gtgcacggtt tcgttggcat gcgcaatgac cgggagaact tgcgttttga tccgagactt
60
ccagcccaat ggagctcgat caaacaccac atgctcattg cgcactctca catgctcggt
120
ttcctggaac gtgacgccat tacgttccag attctgtcgg gccatgaccg cgacgtgaca
180
gtgcgcggtg agctctacca cattgggggt gagccggtga ggggtccggt gtccgatcac
240
gggcccgtgc gtcctagcct gcgcgttacc catccgatct cgggggttcgc tcgagctgac
300
ggttctctta tcaactgcaga agttcccggc agcattgctg agacgattgg gtcttctccg
360
atctcgac
368

```

<210> 300
 <211> 122
 <212> PRT
 <213> Homo sapiens

```

<400> 300
Val His Gly Phe Val Gly Met Arg Asn Asp Arg Glu Asn Leu Arg Phe
1          5          10          15
Asp Pro Arg Leu Pro Ala Gln Trp Thr Ser Ile Lys His His Met Leu
20          25          30
Ile Gly Asp Ser His Met Leu Val Phe Leu Glu Arg Asp Ala Ile Thr
35          40          45
Phe Gln Ile Leu Ser Gly His Asp Arg Asp Val Thr Val Arg Gly Glu
50          55          60
Leu Tyr His Ile Gly Val Glu Pro Val Arg Val Pro Leu Ser Asp Gln
65          70          75          80
Gly Pro Leu Arg Pro Ser Leu Arg Val Thr His Pro Ile Ser Gly Leu
85          90          95
Arg Arg Ala Asp Gly Ser Leu Ile Thr Ala Glu Val Pro Gly Ser Ile
100          105          110
Ala Glu Thr Ile Gly Ser Ser Pro Ile Ser
115          120

```

<210> 301
 <211> 456
 <212> DNA
 <213> Homo sapiens

```

<400> 301
ggccgggtta ttgccgccc gttgtcggg gaaacccggc agaccttcga gcgcaccggc
60
aaccggcgcg actattccgt accgccgcc gaaccgacct tgctcgacag gcttacggac
120
gcgggccgga cgggtgatcg aatcggaag attggtgata tctacgcga caaaggcgtg
180
tctcagggtgc gtaaggcaat ggcaatatg gccttggtcg atgaaacct cattgccatg
240
gacgacgcgc aggacggcga tctggtcttc accaacttcg tggatttcga catgctctac
300
gggcatcgca gggatgtgcc cggctatgcc gccgcgctcg aggctttcga ccggaggctg
360
ccggaagcca tggcgaaatt cgggacgggc gatcttctga tcttgacagc cgatcatggc
420
tgcgaccgca ccctcaaggg aaccgaccac acgcgt
456

```

```

<210> 302
<211> 152
<212> PRT
<213> Homo sapiens

```

```

<400> 302
Gly Arg Val Ile Ala Arg Pro Phe Val Gly Glu Thr Arg Gln Thr Phe
1 5 10 15
Glu Arg Thr Gly Asn Arg Arg Asp Tyr Ser Val Pro Pro Pro Glu Pro
20 25 30
Thr Leu Leu Asp Arg Leu Thr Asp Ala Gly Arg Thr Val Ile Ala Ile
35 40 45
Gly Lys Ile Gly Asp Ile Tyr Ala His Lys Gly Val Ser Gln Val Arg
50 55 60
Lys Ala Met Ala Ile Leu Ala Leu Phe Asp Glu Thr Leu Ile Ala Met
65 70 75 80
Asp Asp Ala Gln Asp Gly Asp Leu Val Phe Thr Asn Phe Val Asp Phe
85 90 95
Asp Met Leu Tyr Gly His Arg Arg Asp Val Pro Gly Tyr Ala Ala Ala
100 105 110
Leu Glu Ala Phe Asp Arg Arg Leu Pro Glu Ala Met Ala Lys Leu Arg
115 120 125
Thr Gly Asp Leu Leu Ile Leu Thr Ala Asp His Gly Cys Asp Pro Thr
130 135 140
Leu Lys Gly Thr Asp His Thr Arg
145 150

```

```

<210> 303
<211> 402
<212> DNA
<213> Homo sapiens

```

```

<400> 303
nnctgtgggca tcgaggagtt cctcgacatg aagtatcacg cgacgcogat tcatcgctcg
60

```

tgacagcgggt tttccggaac acatcagcgt tcagacagga gcgaggagac catgtacctg
 120
 ggtgctcagc tggtcagtga cagcgagtag gagcagcgcc tgagacgtgt ccgtgagctc
 180
 atggaccgtc aggggtctgtc ggcgatcacc gtcaccgata cggccaacat cttctatctg
 240
 atcgggttaca acgcctggtc gttctacacc cgcagatgc tggctgtgcc gatcgacgga
 300
 gagatgggtcc tctacgctcg cgagatggat cgcattggcg acatcngcac gacgtcggtg
 360
 cccgccgata agatcgctcg ttaccggag agttatgtgc ac
 402

<210> 304

<211> 97

<212> PRT

<213> Homo sapiens

<400> 304

Met	Tyr	Leu	Gly	Ala	Gln	Leu	Phe	Ser	Asp	Ser	Glu	Tyr	Glu	Gln	Arg
1				5					10				15		
Leu	Arg	Arg	Val	Arg	Glu	Leu	Met	Asp	Arg	Gln	Gly	Leu	Ser	Ala	Ile
			20					25				30			
Ile	Val	Thr	Asp	Pro	Ala	Asn	Ile	Phe	Tyr	Leu	Ile	Gly	Tyr	Asn	Ala
			35				40					45			
Trp	Ser	Phe	Tyr	Thr	Pro	Gln	Met	Leu	Phe	Val	Pro	Ile	Asp	Gly	Glu
			50				55				60				
Met	Val	Leu	Tyr	Ala	Arg	Glu	Met	Asp	Arg	Met	Ala	His	Ile	Xaa	Thr
65					70				75				80		
Thr	Ser	Leu	Pro	Ala	Asp	Gln	Ile	Val	Gly	Tyr	Pro	Glu	Ser	Tyr	Val
				85					90				95		

His

<210> 305

<211> 375

<212> DNA

<213> Homo sapiens

<400> 305

nnacgcgtcg gttccgcacc gagcgaccgg atcgcatcga cgagcacgct gcaccagtgc
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 gtgctgtcct ggcgaatatg ggcgatcagc cggtagactt cgggatcgct gctcacctcg
 120
 gccgccattt cggatgcgac acgcgcgcct gcgcgtcggc cctccagcaa ctgcgtcgagc
 180
 gtcgccacca gcgcggcgcg atcttcatgc ggagtcagat cggcgcgggc gtcaggcccg
 240
 tcggcatgcy tcggaatcga catgcagcac cctcctgccg gtagcatggc cgtataatcg
 300
 gcgacgggtac acggcgcgty ttgcacgaac gtgcaaatca gcgcgtgcct cgtgccatat
 360
 acgtcacatc atatg
 375

<210> 306
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 306
 Xaa Arg Val Gly Ser Ala Ser Ser Asp Arg Ile Ala Ser Thr Ser Thr
 1 5 10 15
 Leu His Gln Cys Val Ser Ser Trp Arg Ile Trp Ala Ile Ser Arg Tyr
 20 25 30
 Ser Ser Gly Ser Ser Leu Thr Ser Ala Ala Ile Ser Asp Ala Thr Arg
 35 40 45
 Ala Pro Ala Arg Ser Ala Ser Ser Asn Ser Ser Val Ala Thr Ser
 50 55 60
 Ala Ala Arg Ser Ser Cys Gly Val Arg Ser Ala Arg Ala Ser Gly Pro
 65 70 75 80
 Ser Pro Cys Val Gly Ile Asp Met Gln His Pro Pro Ala Arg Ile Asp
 85 90 95
 Gly Val Ile Arg Ala Thr Val His Gly Ala Cys Cys Thr Asn Val Gln
 100 105 110
 Ile Ser Ala Cys Leu Val Pro Tyr Thr Ser His His Met
 115 120 125

<210> 307
 <211> 685
 <212> DNA
 <213> Homo sapiens

<400> 307
 actagtctctg gcgcctcccc tggggccttg ggtaacaatt gtcagcccca cccatcctag
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 ggtaggaag gctattctct ttggccactc tcatacctaag acctattttg agaacctctg
 120
 gggtttgagt ctttttttca gcagaatgag gcttgatccc gcattatagc acctcgaca
 180
 tttgatgtct cttcttctca cccactcacc ccaccctggg ggttggggga aaaagtggc
 240
 tcaaagtgc ggttcagagt tccttgtaaa caaggctcct cctcactgt cctcaccctg
 300
 ctccagcaga gggagcagcg gaaggaccac tctgctgcag ccatgcttgc ttctaaccga
 360
 gcagaactgg acataatggg aacagggtct gaagacaatc aatccagggc tgcagtgggt
 420
 gctgagtctg ggggaagcctc cacctggagg ggcagctggg cagtggcagc tcacctggaa
 480
 tggctcagcc tctggacatc cccccacca accagagccc tggctcttgc tggatgtcca
 540
 cagatgagt cctgggattg gtctcagcca ctatgggggg gatgtgcagg gagagtgat
 600
 gagggagtga gcaggactgt ctatgtgcct ctgtcctcat cctgaggctt gggctctgaaa
 660
 ttggtgctgc agcactggca cgcgt
 685

<210> 308
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 308
 Met Leu Val Ser Asn Pro Ala Glu Leu Asp Ile Met Gly Thr Gly Ser
 1 5 10 15
 Glu Asp Asn Gln Ser Arg Ala Ala Val Gly Ala Glu Ser Gly Glu Ala
 20 25 30
 Ser Thr Trp Arg Gly Ser Trp Ala Val Ala Ala Pro Leu Glu Trp Leu
 35 40 45
 Ser Leu Trp Thr Ser Pro His Pro Thr Arg Ala Leu Ala Leu Ala Gly
 50 55 60
 Cys Pro Gln Met Ser Ala Trp Asp Trp Ser Gln Pro Leu Trp Gly Gly
 65 70 75 80
 Cys Ala Gly Arg Gly Asp Glu Gly Val Ser Arg Thr Val Tyr Val Pro
 85 90 95
 Leu Ser Ser Ser
 100

<210> 309
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 309
 caggctcgta ctattcgat ccctgtgcat atggtcgagg tcatcaataa gctggctcgc
 60
 gtccagcgtc agatgctcca ggacctaggt cgtgagccca ccccggaaga gcttgccaac
 120
 gaactcgata tgaccgcaga gaaggtcatt gaggtgcaga aatacggctc cgagccgac
 180
 tcgctgcata ccccaatggg tgaggatggc gattctgagt tcggtgacct tattgaggat
 240
 tccgaggcca tcgtgccagc agacgccgct aacttcacc tttgagcaga gcagctgcac
 300
 gatgtcctcg atacctgtgc cgagcgagag gccggtgtcg tgctgatcgc attcggcttg
 360
 accgacggac agcccaagac cctggatgag atcggcaaa tctacggtgt tactcgggag
 420
 cgcacccgcc ag
 432

<210> 310
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 310
 Gln Ala Arg Thr Ile Arg Ile Pro Val His Met Val Glu Val Ile Asn
 1 5 10 15
 Lys Leu Ala Arg Val Gln Arg Gln Met Leu Gln Asp Leu Gly Arg Glu

```

                20                25                30
Pro Thr Pro Glu Glu Leu Ala Asn Glu Leu Asp Met Thr Ala Glu Lys
          35                40                45
Val Ile Glu Val Gln Lys Tyr Gly Arg Glu Pro Ile Ser Leu His Thr
          50                55                60
Pro Leu Gly Glu Asp Gly Asp Ser Glu Phe Gly Asp Leu Ile Glu Asp
65          70                75                80
Ser Glu Ala Ile Val Pro Ala Asp Ala Val Asn Phe Thr Leu Leu Gln
          85                90                95
Glu Gln Leu His Asp Val Leu Asp Thr Leu Ser Glu Arg Glu Ala Gly
          100                105                110
Val Val Ser Met Arg Phe Gly Leu Thr Asp Gly Gln Pro Lys Thr Leu
          115                120                125
Asp Glu Ile Gly Lys Val Tyr Gly Val Thr Arg Glu Arg Ile Arg Gln
          130                135                140

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<210> 311

<211> 358

<212> DNA

<213> Homo sapiens

<400> 311

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acgcgtatcg aaaatatccc tccattatt accgctcgcc ctgaactgat ggctcatgaa
60
ctgacgccag aatctcttga tgcgagcctg gagtgggccc atgtggtggt cattggctct
120
ggactgggac aacaagcgtg gggcaaaaaa gcgctacaaa aggtcgagaa ttgtcgtaaa
180
ccgatgctgt gggatgccga cgcgcttaac cttctggcaa tcaatcctga taaacgtcac
240
aatcgcatcc tgacgccaca ccccgccgag gccgcgcggc tgcttagctg cagcgtcgca
300
gaaattgaaa acgatcgctt acttntctgc gcacgtctgg taaaacggta acccgagt
358

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<210> 312

<211> 116

<212> PRT

<213> Homo sapiens

<400> 312

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Thr Arg Ile Glu Asn Ile Pro Pro Ile Ile Thr Ala Arg Pro Glu Leu
1          5                10                15
Met Ala His Glu Leu Thr Pro Glu Ser Leu Asp Ala Ser Leu Glu Trp
          20                25                30
Ala Asp Val Val Val Ile Gly Pro Gly Leu Gly Gln Gln Ala Trp Gly
          35                40                45
Lys Lys Ala Leu Gln Lys Val Glu Asn Cys Arg Lys Pro Met Leu Trp
          50                55                60
Asp Ala Asp Ala Leu Asn Leu Leu Ala Ile Asn Pro Asp Lys Arg His
65          70                75                80
Asn Arg Ile Leu Thr Pro His Pro Gly Glu Ala Ala Arg Leu Leu Ser
          85                90                95
Cys Ser Val Ala Glu Ile Glu Asn Asp Arg Leu Leu Xaa Cys Ala Arg

```



```

                100                105                110
Leu Val Lys Arg
                115

<210> 313
<211> 347
<212> DNA
<213> Homo sapiens

<400> 313
ncaactgaaa gcattgagat gagcgacgtg ctgtccccct tccacccac caaggccaac
60
acccttggtg gcgaaccgcg caccatccgc acctegaacg cgcacatcat tgccgtcacc
120
agtggcaaa gcgcgctggg caagaccttt gtctccgcca acctggccgc cgcgctgacc
180
cgctgggac tgcgcgctgct ggtactggac gccgacctgg gcttgccaa cttggacgtg
240
gtgctgaacc tctaccccaa ggtgacgctg cacgatgtgt tcaccgcaa ggcctcgctg
300
caagacgcgg tggtcacggc ccccgggcgc ttccatgtgc tgctagc
347

<210> 314
<211> 115
<212> PRT
<213> Homo sapiens

<400> 314
Xaa Thr Glu Ser Ile Glu Met Ser Asp Val Leu Ser Pro Phe His Pro
1 5 10 15
Thr Lys Ala Asn Thr Pro Gly Gly Glu Pro Arg Thr Ile Arg Thr Ser
20 25 30
Asn Ala His Ile Ile Ala Val Thr Ser Gly Lys Gly Gly Val Gly Lys
35 40 45
Thr Phe Val Ser Ala Asn Leu Ala Ala Leu Thr Arg Leu Gly Leu
50 55 60
Arg Val Leu Val Leu Asp Ala Asp Leu Gly Leu Ala Asn Leu Asp Val
65 70 75 80
Val Leu Asn Leu Tyr Pro Lys Val Thr Leu His Asp Val Phe Thr Gly
85 90 95
Lys Ala Ser Leu Gln Asp Ala Val Val Thr Ala Pro Gly Gly Phe His
100 105 110
Val Leu Leu
115

<210> 315
<211> 544
<212> DNA
<213> Homo sapiens

<400> 315
nnacgcgttc gtcaacagga aaacaacaac ggcttctcgc tggagggaac catgcttgcc
60

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gaagatatct acgcgatcat gctgttttca tgcctcatcc tggctgtccc ggggccatcc
 120
 aacaccttgc tgctcagcgc ccgtttccat ttcggctcgc tgcgggcgcgc gcccttcate
 180
 ctgcttgagg cggtgggcta ctgcctatcc atttcggcat ggggctgggt attggcgcgc
 240
 ctgtccgaga gcaatccatg gatcatcagt ctgaccaagg cactctgcgc gctatatgtg
 300
 gcgcttctgg cggtgaagac ctggaatgcc ntcgatccgc agtcgggggc cggttaacttc
 360
 cgccatgggc cccctgccct gttcgtggca accctgtcga acccgaaggc gctgatcttc
 420
 gccagcgtga tttttcccg caaggcggtc ctgcacttct ggaacaacta cacgatctcg
 480
 ctgctggcct tcttggttgt gctggcgccc atcgggatgc tttgggtcgg gctggggggc
 540
 ggta
 544

<210> 316

<211> 159

<212> PRT

<213> Homo sapiens

<400> 316

Ile Tyr Ala Ile Met Leu Phe Ser Ser Leu Ile Leu Val Val Pro Gly
 1 5 10 15
 Pro Ser Asn Thr Leu Leu Leu Ser Ala Arg Phe His Phe Gly Ser Leu
 20 25 30
 Arg Ala Ala Pro Phe Ile Leu Leu Glu Ala Leu Gly Tyr Ser Leu Ser
 35 40 45
 Ile Ser Ala Trp Gly Trp Val Leu Ala Arg Leu Ser Glu Ser Asn Pro
 50 55 60
 Trp Ile Ile Ser Leu Thr Lys Ala Leu Cys Ala Leu Tyr Val Ala Leu
 65 70 75 80
 Leu Ala Val Lys Thr Trp Asn Ala Xaa Asp Pro Gln Cys Gly Ala Gly
 85 90 95
 Asn Phe Arg His Gly Pro Leu Pro Leu Ser Val Ala Thr Leu Ser Asn
 100 105 110
 Pro Lys Ala Leu Ile Phe Ala Ser Val Ile Phe Pro Gly Lys Ala Phe
 115 120 125
 Leu Asp Phe Trp Asn Asn Tyr Thr Ile Ser Leu Leu Ala Phe Leu Val
 130 135 140
 Val Leu Ala Pro Ile Gly Met Leu Trp Val Gly Leu Gly Ala Gly
 145 150 155

<210> 317

<211> 343

<212> DNA

<213> Homo sapiens

<400> 317

nggtcagcct ctcgccagc caattctctt aagatacatg agctgctatg agtaccaaag
 60

ccagaggttt gtccactgag agaagcacat tggaaagggg ggcgtgggccc tgggactgtg
 120
 tggcacttta tgcacggggg gggcctaagg gggnggggtcc accaaccatg cactgngggg
 180
 ggggtgtggg taacatgccg tgcattttgg ggggtgtgcc tgagtggcac accatggggg
 240
 tggcatgtgg ggcattgtat catgtggtgt tggcgcagca aactcagctc ttacctggct
 300
 ggggccagcc tctaaaactt ctcacattgg gctcccttct gac
 343

<210> 318

<211> 98

<212> PRT

<213> Homo sapiens

<400> 318

Met	Ser	Thr	Lys	Ala	Arg	Gly	Leu	Ser	Thr	Glu	Arg	Ser	Thr	Leu	Glu
1			5					10					15		
Arg	Gly	Ala	Trp	Ala	Trp	Asp	Cys	Val	Ala	Leu	Tyr	Ala	Arg	Gly	Gly
		20				25					30				
Pro	Lys	Gly	Gly	Gly	Pro	Pro	Thr	Met	His	Xaa	Gly	Trp	Gly	Val	Gly
		35				40					45				
Asn	Met	Pro	Cys	Ile	Leu	Gly	Val	Cys	His	Glu	Trp	His	Thr	Met	Gly
	50				55					60					
Val	Ala	Cys	Gly	Ala	Cys	Met	His	Val	Val	Leu	Ala	Gln	Gln	Thr	Gln
65				70				75					80		
Leu	Leu	Pro	Gly	Trp	Gly	Gln	Pro	Leu	Lys	Leu	Leu	Thr	Leu	Gly	Ser
			85					90					95		

Leu Leu

<210> 319

<211> 429

<212> DNA

<213> Homo sapiens

<400> 319

gaattctcga tgtacccct cccggcagtc ctattctcga gctgagcggg cacagtggcc
 60
 ccgttaacag tgtggcttgg ggtccacca gccagagcac gttgcgaaat ggacctagta
 120
 agggcatgat atgtacagga ggcgacgatg ctcagtgcct cgtatatgat ctgactagct
 180
 caactcttcg aacagcatct gctcaaggac ggcgtctctg aaacagtcca tataaacaaa
 240
 gccattcacc gggaatagag ggatggcgtg tcggcgcgaga agtgcgggtg ctcgcttata
 300
 cggccccgtc tatggccaac aatgetagct ggctcggcat gctcgcgcca tcaaaacgca
 360
 catcgctaca gagcaaacac cgcagccttt accgcagctt actcagttag tggactgagt
 420
 atacgtccn
 429

<210> 320
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 320
 Met Ile Cys Thr Gly Gly Asp Asp Ala Gln Cys Leu Val Tyr Asp Leu
 1 5 10 15
 Thr Ser Ser Thr Leu Arg Thr Ala Ser Ala Gln Gly Arg Arg Ser Arg
 20 25 30
 Asn Ser Pro Tyr Lys Gln Ser His Ser Pro Gly Ile Asp Gly Trp Arg
 35 40 45
 Val Gly Ala Glu Val Pro Val Leu Ala Tyr Thr Ala Pro Ser Met Val
 50 55 60
 Asn Asn Ala Ser Trp Leu Gly Met Pro Ala Pro Ser Lys Arg Thr Ser
 65 70 75 80
 Leu Gln Ser Lys His Arg Ser Leu Tyr Arg Ser Leu Leu Ser Glu Trp
 85 90 95
 Thr Glu Tyr Thr Ser
 100

<210> 321
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 321
 ngtgcacgac gtgctcgcca agtccctcgg gtcctctaata cgcgatcaacg tggttcacgc
 60
 caccgtcgat gcgttgacgc agctcgagga gcccgaaagag gtcgcccgc gccgcggcaa
 120
 gtccgttgag gagatcgccc cagcagccat gctgcgtgcg cgcaaggagg ccgacgaggc
 180
 cgccgctgct gcccgcatgg aggaaaaggc ggggggtaac tgatgagcaa gctgaagatc
 240
 acccagatca agtctggcat cgctaccaag ccaaatcatc gtgagaccct gcgcagcctc
 300
 ggactgaagc gtattggtga cacggtcac caggaggacc gcccgaggtt ccgcggcatg
 360
 gtccggacgc ttctgcacct cgtcaccatg gaagaggtgg actgacatgg ctattgagct
 420
 ccatgacctc aagcccgctc ctggtgccca caaggccaag acccggttg gtcgtggtga
 480
 gggttccaag ggtaagaccg ctggtcgcgg taccaagggc accggtgcac
 530

<210> 322
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 322
 Met Ser Lys Leu Lys Ile Thr Gln Ile Lys Ser Gly Ile Ala Thr Lys

```

      1           5           10           15
Pro Asn His Arg Glu Thr Leu Arg Ser Leu Gly Leu Lys Arg Ile Gly
      20           25           30
Asp Thr Val Ile Lys Glu Asp Arg Pro Glu Phe Arg Gly Met Val Arg
      35           40           45
Thr Val Arg His Leu Val Thr Met Glu Glu Val Asp
      50           55           60

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<210> 323

<211> 468

<212> DNA

<213> Homo sapiens

<400> 323

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ntccggagccc gctgtggcca cgtattctgc cgttcctgta ttgctaccag tctaaagaac
60
aacaagtgga cctgtcctta ttgccgggca tatcttcctt cagaaggagt tccagcaact
120
gatgtagcca aaagaatgaa atcagagtat aagaactgcg ctgagtgtga caccctgggt
180
tgccctcagt aaatgagggc acatattcgg acttgtcaga agtcataga taagtatgga
240
ccactacaag aacttgagga gacagcagca aggtgtgtat gtcccttttg tcagagggaa
300
ctgtatgaag acagcttgct ggatcattgt attactcatc acagatcgga acggaggcct
360
gtgttctgtc cactttgcca ttttaataccc gatgagaatc caagcagctt cagtggcagt
420
ttaataagac atctgcaagt tagtcacact ttggtttatg atgatttc
468

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<210> 324

<211> 156

<212> PRT

<213> Homo sapiens

<400> 324

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Xaa Arg Thr Arg Cys Gly His Val Phe Cys Arg Ser Cys Ile Ala Thr
      1           5           10           15
Ser Leu Lys Asn Asn Lys Trp Thr Cys Pro Tyr Cys Arg Ala Tyr Leu
      20           25           30
Pro Ser Glu Gly Val Pro Ala Thr Asp Val Ala Lys Arg Met Lys Ser
      35           40           45
Glu Tyr Lys Asn Cys Ala Glu Cys Asp Thr Leu Val Cys Leu Ser Glu
      50           55           60
Met Arg Ala His Ile Arg Thr Cys Gln Lys Tyr Ile Asp Lys Tyr Gly
      65           70           75           80
Pro Leu Gln Glu Leu Glu Thr Ala Ala Arg Cys Val Cys Pro Phe
      85           90           95
Cys Gln Arg Glu Leu Tyr Glu Asp Ser Leu Leu Asp His Cys Ile Thr
      100          105          110
His His Arg Ser Glu Arg Arg Pro Val Phe Cys Pro Leu Cys His Leu
      115          120          125
Ile Pro Asp Glu Asn Pro Ser Ser Phe Ser Gly Ser Leu Ile Arg His

```

130 135 140
 Leu Gln Val Ser His Thr Leu Val Tyr Asp Asp Phe
 145 150 155

<210> 325
 <211> 374
 <212> DNA
 <213> Homo sapiens

<400> 325
 acgcgtgaag ggaggacgag gaagtaacgg gaagcacaag gccctgctg gggagatggc
 60
 actggagccc ctaggaagc atctcacagg ctgtggccct tggcacgggg atctggggcc
 120
 aggtcgagcg caggtctggg tatcatgcga gtgcgggctc gctggggcgg gaaagagttt
 180
 ggagctctgc tcccaggga tccccactcc cgcagatgac ttgcccagaga gagttctgct
 240
 ggtggatttt gatggaaatt ctatttgatc gcacccactt ggttcaactgt gtgcttcagg
 300
 gtccccagggt tttaggtgct tcatgccctg ctgggaacga gacacgctcc tgccctcagt
 360
 gaattctcag tcta
 374

<210> 326
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 326
 Met Lys His Leu Lys Pro Gly Asp Pro Glu Ala His Ser Glu Pro Ser
 1 5 10 15
 Gly Cys Asp Gln Ile Glu Phe Pro Ser Lys Ser Thr Ser Arg Thr Leu
 20 25 30
 Ser Gly Lys Ser Ser Ala Gly Val Gly Ile Pro Trp Glu Gln Ser Ser
 35 40 45
 Lys Leu Phe Pro Ala Pro Ala Ser Pro His Ser His Asp Thr Gln Thr
 50 55 60
 Cys Ala Arg Pro Gly Pro Arg Ser Pro Cys Gln Gly Pro Gln Pro Val
 65 70 75 80
 Arg Cys Phe Leu Gly Gly Ser Ser Ala Ile Ser Pro Ala Ala Ala Leu
 85 90 95
 Cys Phe Pro Leu Leu Pro Arg Pro Pro Phe Thr Arg
 100 105

<210> 327
 <211> 538
 <212> DNA
 <213> Homo sapiens

<400> 327
 cactataaaa tccagtttgg ggcccgtgtt ctttctatt ggtctgtcag gtgaaaaact
 60

ccggctgggg gaaaagcgtc cggtggtttg ttggtaaaga gggcgctga tgggctctgg
 120
 ggaatggagg atggcgacc ggctgtgggt ggactgtgga aacgggggt ggcagtgccg
 180
 gggtagttgt cctgctggtc tggttttggg atcctgggct ggagaaatgc gatccaaaag
 240
 agctcggtat gggctcagag cgacccacga aaataccagg ggccaagtaa aatgaaccca
 300
 ccctttaaca gtgcacaaag cgctggcaca cggtccacgt ctggtgacgc aggctgcccc
 360
 aagcgctcca accattttgc aaacctggga gagcaagagg ggctctgcag gtctagccgc
 420
 cgccccgtgc cactctggc cagccggagt tttcaccta cagaccaata ggaagaaca
 480
 cgggcccaaa actggatttt atagtctgag ctctcagcat ctaaggaatg atatgcc
 538

<210> 328

<211> 125

<212> PRT

<213> Homo sapiens

<400> 328

Met	Val	Gly	Ala	Leu	Arg	Ala	Ala	Cys	Val	Thr	Arg	Arg	Gly	Pro	Cys
1				5					10				15		
Ala	Ser	Ala	Leu	Cys	Thr	Val	Lys	Gly	Trp	Val	His	Phe	Thr	Trp	Pro
			20					25					30		
Leu	Val	Phe	Ser	Trp	Val	Ala	Leu	Ser	Pro	Ser	Arg	Ala	Leu	Leu	Asp
		35					40					45			
Arg	Ile	Ser	Pro	Ala	Gln	Asp	Pro	Lys	Thr	Arg	Pro	Ala	Gly	Gln	Leu
		50				55					60				
Pro	Arg	His	Cys	His	Pro	Pro	Phe	Pro	Gln	Ser	Thr	His	Ser	Arg	Cys
		65			70					75				80	
Ala	Ile	Leu	His	Ser	Pro	Glu	Pro	Ile	Thr	His	Pro	Leu	Tyr	Gln	Gln
			85					90						95	
Thr	Thr	Gly	Arg	Phe	Ser	Pro	Ser	Arg	Ser	Phe	Ser	Pro	Asp	Arg	Pro
			100					105					110		
Ile	Gly	Lys	Asn	Thr	Gly	Pro	Lys	Leu	Asp	Phe	Ile	Val			
		115					120					125			

<210> 329

<211> 407

<212> DNA

<213> Homo sapiens

<400> 329

tccggagagt tccctcccca ggaattcctt ctaagaatcc atgtggaat agagcctgaa
 60
 gctcttcagt cttttctgct cactgagcag tgttttctcg atacccttgg tatectgcca
 120
 gcagcctcgt tatgactcct aactccattg cctccatgg cccctgggag ctctctctct
 180
 ctttctctcc aggtagtaga gcactgcttc tggtctcttg tgcacagaag gggttccac
 240

agctgagagc tgggctccta ctgacatagt tatttccttt atactctgcc ccacctcttt
 300
 ctggtagcac acagcaacct tgcatagtat ctggtatcat taccttccca atcaacaggc
 360
 cttgatttct tataggactt tttctctcag atttacattg cttcttt
 407

<210> 330

<211> 113

<212> PRT

<213> Homo sapiens

<400> 330

Met	Ile	Pro	Ala	Thr	Met	Gln	Gly	Cys	Cys	Val	Leu	Pro	Glu	Glu	Gly
1				5					10					15	
Gly	Ala	Gly	Tyr	Lys	Gly	Asn	Asn	Tyr	Val	Ser	Arg	Ser	Pro	Ala	Leu
			20					25					30		
Ser	Cys	Gly	Lys	Pro	Phe	Cys	Ala	Gln	Glu	Ala	Arg	Ser	Ser	Ala	Leu
		35					40					45			
Leu	Pro	Gly	Glu	Lys	Glu	Arg	Glu	Ser	Ala	Gln	Gly	Pro	Trp	Arg	Ala
		50				55					60				
Met	Glu	Leu	Gly	Val	Ile	Thr	Arg	Leu	Leu	Ala	Gly	Tyr	Gln	Gly	Tyr
65					70					75				80	
Gln	Glu	Asn	Thr	Ala	Gln	Trp	Ser	Arg	Lys	Thr	Glu	Glu	Leu	Gln	Ala
			85						90					95	
Leu	Phe	Pro	His	Gly	Phe	Leu	Glu	Gly	Ile	Pro	Gly	Glu	Gly	Thr	Leu
			100						105					110	

Arg

<210> 331

<211> 523

<212> DNA

<213> Homo sapiens

<400> 331

tgtaccgaac ctgctggtct cgagggcctt gctgggctcg tcgtacgcac agctgacgaa
 60
 tccaccggcc cccatcccg cgccactttc gctgaggcca tggagtcgat cggagccagg
 120
 tacgacggat cggccggggtt ggccggaagt cacgtcggcg tcgatgtgcc cgtgacaagg
 180
 ttcgacgcag cggtgaact cttcgtcgaa ttgttgaaca ccacagacgt ggttgaagag
 240
 gacatgccc gtcagatcga cgccggcgga gcctccctgg ccagaccag ccagcgcgga
 300
 tcggccctag ccgagatggc agcagcagct gcgctatggc cagtggggtc acggtcgctc
 360
 ctgcccacga tcggtaccct ctcgctgggt gaaaagctca acgcccagc cgcacgagaa
 420
 ttctgggccc cgcactggac gatctccgat gccgtgctgg tgggtgcccg agagggagtc
 480
 gaggacctcg acttgtaaat attcaaggag tggacgacca gct
 523

<210> 332
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 332
 Cys Thr Glu Pro Ala Gly Leu Glu Gly Leu Ala Gly Leu Val Val Arg
 1 5 10 15
 Thr Ala Asp Glu Ser Thr Gly Pro His Pro Gly Ala Thr Phe Ala Glu
 20 25 30
 Ala Met Glu Ser Ile Gly Ala Ser Tyr Asp Gly Ser Ala Gly Leu Ala
 35 40 45
 Gly Ser His Val Gly Val Asp Val Pro Val Thr Arg Phe Asp Ala Ala
 50 55 60
 Ala Glu Leu Phe Val Glu Leu Leu Asn Thr Thr Ser Leu Val Glu Glu
 65 70 75 80
 Asp Ile Ala Arg Gln Ile Asp Ala Ala Arg Ala Ser Leu Ala Gln Thr
 85 90 95
 Ser Gln Arg Gly Ser Ala Leu Ala Glu Met Ala Ala Ala Arg Ala Leu
 100 105 110
 Trp Pro Val Gly Ser Arg Ser Ser Leu Pro Thr Ile Gly Thr Leu Ser
 115 120 125
 Ser Val Glu Lys Leu Asn Ala Ala Ala Ala Arg Glu Phe Trp Ala Ala
 130 135 140
 His Trp Thr Ile Ser Asp Ala Val Leu Val Ala Gly Glu Gly Val
 145 150 155 160
 Glu Asp Leu Asp Leu Ser Ile Phe Lys Glu Trp Thr Thr Ser
 165 170

<210> 333
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 333
 nntgttcgtc gtgtcgaccc ggaactcaag gcccgaggca tgacgggtgaa ggtgcccaacc
 60
 gatccccatc accgccccggg agttccattg aagtctcgca aggaccgtat ggacatcatt
 120
 tctgcttacc gagaactcgg aagctatcgc gccgcagccg aggtgtgcgg caccacccac
 180
 aagaccgtca agcgggtggt cgatcggttt gaagccggcg atccaccacac cggtggcgaag
 240
 gaacggggccc gcaactacga tgcgggtggcc cagctcgtcg cgcagcgagt cgcgcgggtca
 300
 cacggccgga tcaactccaa acggtcgcta ccggtagcgc gagcggcgagg atatgagggg
 360
 tcggcgcgga at
 372

<210> 334
 <211> 88
 <212> PRT

<213> Homo sapiens

<400> 334

```

Met Asp Ile Ile Ser Ala Tyr Arg Glu Leu Gly Ser Tyr Arg Ala Ala
 1             5             10             15
Ala Glu Val Cys Gly Thr Thr His Lys Thr Val Lys Arg Val Val Asp
      20             25             30
Arg Phe Glu Ala Gly Asp Pro Pro Thr Gly Gly Lys Glu Arg Ala Arg
      35             40             45
Asn Tyr Asp Ala Val Ala Gln Leu Val Ala Gln Arg Val Ala Arg Ser
      50             55             60
His Gly Arg Ile Thr Ala Lys Arg Leu Leu Pro Val Ala Arg Ala Ala
      65             70             75             80
Gly Tyr Glu Gly Ser Ala Arg Asn
      85

```

<210> 335

<211> 356

<212> DNA

<213> Homo sapiens

<400> 335

```

gtgcacgcct tgctggggcga gggcgatgcg cctgcgcgca ccttcgtgga cggtaaccttt
60
ggcagggggag ggcattcgcg gctcatcctg cagcggttgg ggccgcaagg ccgcctgggtg
120
gcgttcgaca aggacaccga agccattcaa gcagcggcgc gcatcacgga tgcgcgccttt
180
tccatcnggc accagggggtt cagccatctc ggggaactcg ccgccgccag cgtgtccgggt
240
gtgctgtctgg acctggggcgt gagctccccg cagatcgacg acccccacgc cgggttcagt
300
tttcgttttc atggtccgct ggacatgcgc atggacacca ctccgatgca tggatg
356

```

<210> 336

<211> 118

<212> PRT

<213> Homo sapiens

<400> 336

```

Val His Ala Leu Leu Gly Glu Gly Asp Ala Pro Ala Arg Thr Phe Val
 1             5             10             15
Asp Gly Thr Phe Gly Arg Gly Gly His Ser Arg Leu Ile Leu Gln Arg
      20             25             30
Leu Gly Pro Gln Gly Arg Leu Val Ala Phe Asp Lys Asp Thr Glu Ala
      35             40             45
Ile Gln Ala Ala Ala Arg Ile Thr Asp Ala Arg Phe Ser Ile Xaa His
      50             55             60
Gln Gly Phe Ser His Leu Gly Glu Leu Pro Ala Ala Ser Val Ser Gly
      65             70             75             80
Val Leu Leu Asp Leu Gly Val Ser Ser Pro Gln Ile Asp Asp Pro Gln
      85             90             95
Arg Gly Phe Ser Phe Arg Phe Asp Gly Pro Leu Asp Met Arg Met Asp

```

```

                100                105                110
Thr Thr Pro Met His Gly
                115

<210> 337
<211> 447
<212> DNA
<213> Homo sapiens

<400> 337
cagcctctct cgcaccgcgc cgggtgtgaag cacgggcatg ccggtgtgca agtggcacca
60
cagccaaaac agcgagctca cacttcaaac tccttcaaag accccaggcc tctgtaagaa
120
ccgctcatct ctgtgcccac agctccccgc cttccatgtg acccagaaaat ggaaccacgc
180
agcagaggcg gggatcacag gtgaagcagc tgtgaacatt tgcttcaggc tctgtgcaa
240
acaggcgcca tcattgtcagc cgggtgagcag gagcaacgtg cgtgggtcag ggggtggcca
300
cacgtccaac ttataagaa atgacagatt ccctgatggc catagggatc tgcagggcca
360
gcagcaggca taggacttcc ggtggccctg cgtcttcac aacactgagt attgtcaggg
420
tttctgtact gtttttacag ccaattg
447

<210> 338
<211> 111
<212> PRT
<213> Homo sapiens

<400> 338
Met Pro Val Cys Lys Trp His His Ser Gln Asn Ser Glu Leu Thr Leu
1 5 10 15
Gln Thr Pro Ser Lys Thr Pro Gly Leu Cys Lys Asn Arg Ser Ser Leu
20 25 30
Cys Pro Gln Leu Pro Arg Phe His Val Thr Gln Lys Trp Asn His Ala
35 40 45
Ala Glu Ala Gly Ile Thr Gly Glu Ala Ala Val Asn Ile Cys Phe Arg
50 55 60
Leu Leu Cys Lys Gln Ala Pro Ser Cys Gln Pro Val Ser Arg Ser Asn
65 70 75 80
Val Arg Gly Ser Gly Gly Gly His Thr Ser Asn Phe Ile Arg Asn Asp
85 90 95
Arg Phe Pro Asp Gly His Arg Asp Leu Gln Gly Gln Gln Ala
100 105 110

<210> 339
<211> 588
<212> DNA
<213> Homo sapiens

<400> 339

```

tctagaatga agcgctgtat cctagcaccg gcagacgtac caagactatc aagggcgctca
 60
 gatcggttat cctgcagttg ccattcatca gacaaatcca ttggaaccca atggaagaca
 120
 ccgacctgca agcgctgatg gccagactcg aattgctaata tgatcgggtc gagcaactta
 180
 agagtcaaaa cggactccta ttagctcagg aaaagacctg ggcgcganaa cgcgctcacc
 240
 tcattgaaaa aaacgaaatc gcccgcgcta aggtcgaatc gatgatttcg cgcctgaagg
 300
 ccctggagca agactatgag ttaagcaata gcgttacgtg cagatccctg acaagaata
 360
 ttgatcatc tgccccagg aagaacgcag cacctgggtga gtgctgcccc ctacctggaa
 420
 ggccaaaagg cgtgaaatcc gcagcagcgg caaagtcac ggtgccgacc gcacgcgctg
 480
 gatggccgcy ctgaacatca cccacgatct gctgcataag caggaacggc ctgacgttca
 540
 ggccagcggc tcaacgcgcy agcaagtgcg tgacctgctg gaacgcgt
 588

<210> 340

<211> 123

<212> PRT

<213> Homo sapiens

<400> 340

Met	Glu	Asp	Thr	Asp	Leu	Gln	Ala	Leu	Met	Ala	Arg	Leu	Glu	Leu	Leu
1				5					10					15	
Ile	Asp	Arg	Val	Glu	Gln	Leu	Lys	Ser	Gln	Asn	Gly	Leu	Leu	Leu	Ala
			20					25					30		
Gln	Glu	Lys	Thr	Trp	Ala	Arg	Xaa	Arg	Ala	His	Leu	Ile	Glu	Lys	Asn
			35				40					45			
Glu	Ile	Ala	Arg	Arg	Lys	Val	Glu	Ser	Met	Ile	Ser	Arg	Leu	Lys	Ala
			50			55				60					
Leu	Glu	Gln	Asp	Tyr	Glu	Leu	Ser	Asn	Ser	Val	Thr	Cys	Arg	Ser	Ser
			65		70				75				80		
Thr	Lys	Asn	Ile	Arg	Ser	Ser	Ala	Pro	Arg	Lys	Asn	Ala	Ala	Pro	Gly
			85					90					95		
Glu	Cys	Cys	Pro	Leu	Pro	Gly	Arg	Pro	Lys	Gly	Val	Lys	Ser	Ala	Ala
			100					105					110		
Ala	Ala	Lys	Ser	Ser	Val	Pro	Thr	Ala	Ser	Pro					
			115				120								

<210> 341

<211> 401

<212> DNA

<213> Homo sapiens

<400> 341

ngccgcgcgg cctacctgct gtacctggcc tatgccacct ggcgtagacc ctcggccttt
 60
 gcaatgaacg acacgcgcgac agttgcgacc gcgcgcagcc tgatcctgcg tggctctctg
 120

ctgaacattc ttaaccccaa gctgacaatt ttcttctctg ccttctctgcc tcaattcgta
 180
 acgccaggcg gcaccgcgcc ggccttgtag atgctggtac tgagcggcgt gttcatggcg
 240
 atgacgcttg cagtgtttgt gctgtatggc ctgttggcga atgtgtttcg tcgtgcagtg
 300
 gtcgagtcgc cacgtgtgca gaactggctg cgacgcagtt ttgccacggc ctttgccggg
 360
 ctgggggtga acctggcggt tgccgcagcg tgaggacgcg t
 401

<210> 342
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 342
 Xaa Arg Ala Ala Tyr Leu Leu Tyr Leu Ala Tyr Ala Thr Trp Arg Asp
 1 5 10 15
 Arg Ser Ala Phe Ala Met Asn Asp Thr Pro Thr Val Ala Thr Ala Arg
 20 25 30
 Ser Leu Ile Leu Arg Gly Phe Leu Leu Asn Ile Leu Asn Pro Lys Leu
 35 40 45
 Thr Ile Phe Phe Leu Ala Phe Leu Pro Gln Phe Val Thr Pro Gly Gly
 50 55 60
 Thr Ala Pro Ala Leu Gln Met Leu Val Leu Ser Gly Val Phe Met Ala
 65 70 75 80
 Met Thr Leu Ala Val Phe Val Leu Tyr Gly Leu Leu Ala Asn Val Phe
 85 90 95
 Arg Arg Ala Val Val Glu Ser Pro Arg Val Gln Asn Trp Leu Arg Arg
 100 105 110
 Ser Phe Ala Thr Ala Phe Ala Gly Leu Gly Leu Asn Leu Ala Phe Ala
 115 120 125
 Gln Arg
 130

<210> 343
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 343
 gtgttcgcga actacatggc gtccttgccg ttcagcgtgg tcgagtcggc gcgcgatcga
 60
 ggggtgctcca acttccagat cttctggaag ctgatcgccc cgatggcgat gccggcgatg
 120
 gcggcgcttg cgacctgca gttcctgtgg gtgtggaacg acctgtctcat cgccaagctc
 180
 ttcttcacca acgacaaccc caccgtgata gtcaagctcc aacagcttcc cnnngggccc
 240
 aaggcccgag gtgcggagct gctgacggcg ggcgccttca tctccatcgt gctaccatg
 300
 atcgtcttct tcgtgtccca gaacttctg gtgcgcggta tgacgtcggg tgccgtcaag
 360

gggtgaccgc tcaactgcag tggcccgagg
389

<210> 344
<211> 121
<212> PRT
<213> Homo sapiens

<400> 344
Val Leu Arg Asn Tyr Met Ala Ser Leu Pro Phe Ser Val Val Glu Ser
1 5 10 15
Ala Arg Ile Asp Gly Cys Ser Asn Phe Gln Ile Phe Trp Lys Leu Ile
20 25 30
Ala Pro Met Ala Met Pro Ala Met Ala Ala Phe Ala Thr Leu Gln Phe
35 40 45
Leu Trp Val Trp Asn Asp Leu Leu Ile Ala Lys Leu Phe Leu Thr Asn
50 55 60
Asp Asn Pro Thr Val Ile Val Lys Leu Gln Gln Leu Ser Xaa Gly Pro
65 70 75 80
Lys Ala Gln Gly Ala Glu Leu Leu Thr Ala Gly Ala Phe Ile Ser Ile
85 90 95
Val Leu Pro Met Ile Val Phe Phe Val Leu Gln Asn Phe Leu Val Arg
100 105 110
Gly Met Thr Ser Gly Ala Val Lys Gly
115 120

<210> 345
<211> 360
<212> DNA
<213> Homo sapiens

<400> 345
ctagtacttt atgctgatgg tgaacgtcgt tacatccttg ccctctaaagg catggttgct
60
ggtgatgtga tccaatctgg tgaagatgca tcaattaaag taggtaactg cttaccgatg
120
cgtaatatcc cagttggtac aacagtacac gctgtagaaa tgaacacctgc taaagggtgca
180
caaatgtcac gttctgctgg ttcttacagc caaattatag ctctgtagtg tgcttacggt
240
actctacggt tacgtagtgg tgaatgcgt aaaatccctg ctgagtgtcg tgcaacaatc
300
ggtgaagttg gtaatgcaga acatatgcta cgtcaactag gtaaaagctgg tgctacgcgt
360

<210> 346
<211> 120
<212> PRT
<213> Homo sapiens

<400> 346
Leu Val Leu Tyr Ala Asp Gly Glu Arg Arg Tyr Ile Leu Ala Pro Lys
1 5 10 15
Gly Met Val Ala Gly Asp Val Ile Gln Ser Gly Glu Asp Ala Ser Ile

```

                20                25                30
Lys Val Gly Asn Cys Leu Pro Met Arg Asn Ile Pro Val Gly Thr Thr
                35                40                45
Val His Ala Val Glu Met Lys Pro Ala Lys Gly Ala Gln Ile Ala Arg
                50                55                60
Ser Ala Gly Ser Tyr Ser Gln Ile Ile Ala Arg Asp Gly Ala Tyr Val
65                70                75                80
Thr Leu Arg Leu Arg Ser Gly Glu Met Arg Lys Ile Pro Ala Glu Cys
                85                90                95
Arg Ala Thr Ile Gly Glu Val Gly Asn Ala Glu His Met Leu Arg Gln
                100                105                110
Leu Gly Lys Ala Gly Ala Thr Arg
                115                120

```

```

<210> 347
<211> 565
<212> DNA
<213> Homo sapiens

```

```

<400> 347
accggtgatg ccaaagggtgc tgtgacaagg ggattcatcg gttcgggcaa ggtcgtcacg
60
gcagctgcgc tcatacatgat ttcggtgttc gtcttcttca tccccgaggg catgaacgcc
120
atcaaggaaa tcgcctggc cctggcgcgc gggatcctca cggatgcctt cttggtgcgg
180
atgacctcgc tccccgccgt gatggccctg ctaggtgaca aggcattggt gttgcccggg
240
tggctggatc gacgcctacc cgcctcgac atcgaggag aagggatcac ccacgaggaa
300
aagctggccg cctggcccac agcggatcac accgaggccc tgcacgccga ggggatcggg
360
gtggaggggc tcttcgaagg cctcgatctg cacgtcgaac cgcgtcaggt gcaagccgtc
420
gtcggatcgc agaacagtgt ctgcgccgtc ctgctggcga tcggggggacg gctgcccttg
480
gatcacggcc ggatgagggtc gggaggattg ctgctacccg agcgggcttc cagagtgcgt
540
cgggtgacgt ggttcctcga cgcgt
565

```

```

<210> 348
<211> 188
<212> PRT
<213> Homo sapiens

```

```

<400> 348
Thr Gly Asp Ala Lys Gly Ala Val Thr Arg Gly Phe Ile Gly Ser Gly
1                5                10                15
Lys Val Val Thr Ala Ala Ala Val Ile Met Ile Ser Val Phe Val Phe
                20                25                30
Phe Ile Pro Glu Gly Met Asn Ala Ile Lys Glu Ile Ala Leu Ala Leu
                35                40                45
Ala Val Gly Ile Leu Thr Asp Ala Phe Leu Val Arg Met Thr Leu Val

```

```

      50              55              60
Pro Ala Val Met Ala Leu Leu Gly Asp Lys Ala Trp Trp Leu Pro Gly
65      70      75      80
Trp Leu Asp Arg Arg Leu Pro Arg Leu Asp Ile Glu Gly Glu Gly Ile
      85      90      95
Thr His Glu Glu Lys Leu Ala Ala Trp Pro Thr Ala Asp His Thr Glu
      100      105      110
Ala Leu His Ala Glu Gly Ile Gly Val Glu Gly Leu Phe Glu Gly Leu
      115      120      125
Asp Leu His Val Glu Pro Arg Gln Val Gln Ala Val Val Gly Ser Gln
      130      135      140
Asn Ser Val Ser Ala Val Leu Leu Ala Ile Gly Gly Arg Leu Pro Leu
      145      150      155      160
Asp His Gly Arg Met Arg Ser Gly Gly Leu Leu Leu Pro Glu Arg Ala
      165      170      175
Ser Arg Val Arg Arg Val Thr Trp Phe Leu Asp Ala
      180      185

```

<210> 349

<211> 339

<212> DNA

<213> Homo sapiens

<400> 349

```

ntgctggcca cggataatga ccgtactctg cgtgatgtcg ttgccgctga ccctacccat
60
gagctcgggt cggctaccgc tcatacgttt gcggacaatt tgccgttctt tcttaaacgt
120
ctcgcggcag aagagccact atcgtttcag gctcatccca gtttggcgca agcacaggaa
180
gggtacgggc gggagaatcg caaaggggtg ccattagatg cccagaccg gaattaccac
240
gatcccaacc ataaaccgga gcttattgtt gggctgacgc gattccacgc actagccggc
300
ttccgtgaac cacaacgcac acttgagctt tttgacgcg
339

```

<210> 350

<211> 113

<212> PRT

<213> Homo sapiens

<400> 350

```

Xaa Leu Ala Thr Asp Asn Asp Arg Thr Leu Arg Asp Val Val Ala Ala
1      5      10      15
Asp Pro Thr His Glu Leu Gly Ser Ala Thr Ala His Thr Phe Ala Asp
      20      25      30
Asn Leu Pro Phe Leu Leu Lys Leu Leu Ala Ala Glu Glu Pro Leu Ser
      35      40      45
Leu Gln Ala His Pro Ser Leu Ala Gln Ala Gln Glu Gly Tyr Gly Arg
      50      55      60
Glu Asn Arg Lys Gly Val Pro Leu Asp Ala Pro Asp Arg Asn Tyr His
65      70      75      80
Asp Pro Asn His Lys Pro Glu Leu Ile Val Gly Leu Thr Arg Phe His

```


	85		90		95										
Ala	Leu	Ala	Gly	Phe	Arg	Glu	Pro	Gln	Arg	Thr	Leu	Glu	Leu	Phe	Asp
	100						105						110		
Ala															

<210> 351
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 351
 gcgcgcccc gtcgcgagac ccggggccttc aggagccggc ccggggagag aagagtgcgg
 60
 cggcggacgg agaaaacaac tccaaagttg gcgaaaggca ccgccctac tccggggctg
 120
 ccgcgcctc ccgcgccca gccctggcat ccagagtacg ggtagagccc gnggccatgg
 180
 agccccctg gggaggcggc accaggagc ctggggcccg gggctccgcc gcgaccccat
 240
 cgggtagacc acagaagctc cgggacctt ccggcacctc tggacagccc aggatgctgt
 300
 tggccacccn ntcctctcc tctcctctgg aggcgctctg gcccatccag accg
 354

<210> 352
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 352
 Ala Arg Pro Ser Ala Glu Thr Arg Gly Phe Arg Ser Arg Pro Arg Glu
 1 5 10 15
 Arg Arg Val Arg Arg Arg Thr Glu Lys Thr Thr Pro Lys Leu Ala Lys
 20 25 30
 Gly Thr Ala Pro Thr Pro Gly Leu Pro Pro Pro Pro Arg Pro Gln Pro
 35 40 45
 Trp His Pro Glu Tyr Gly Ser Ser Pro Xaa Pro Trp Ser Pro Pro Gly
 50 55 60
 Glu Ala Ala Pro Gly Ser Leu Gly Pro Gly Ala Pro Pro Arg Pro His
 65 70 75 80
 Arg Val Asp His Arg Ser Ser Gly Thr Leu Pro Ala Pro Leu Asp Ser
 85 90 95
 Pro Gly Cys Cys Trp Pro Pro Xaa Pro Pro Pro Pro Trp Arg Arg
 100 105 110
 Ser Gly Pro Ser Arg Pro
 115

<210> 353
 <211> 1469
 <212> DNA
 <213> Homo sapiens

<400> 353

nntcatgaag gcttgaactt gcgtgatctt cagcctgcgg acctggcggg tgacggcggt
 60
 attgagccgg tggacctcgt ggtcggagat gtctctttta tctccttgac gatgatcctt
 120
 gaacccattt cagctgttgt cagcccaac ggcctcatgc tgggtcgtgt gaagcctcaa
 180
 tttgaggttg gttgcaaggc tttgggagcc catggcggtt tcacggagcc ggccctgcgc
 240
 ttgcaggcca tcgcggtgtt catggcagca gcggtagatt tgggttggcg tatcgtgac
 300
 gagtgcgata gcccgttgcc cgggcaggat ggaaacgttg agcacttcgt cttgctggaa
 360
 cgtacgggtc ggtgacagac gtccgggcat atcatgggccc gctacttggt tcttgtgaac
 420
 gacacgagcc ctctgagata cgttgctcgc gtcacccatg ccacgcggga cgacgctttt
 480
 gacgcggctg ccgaattcat ctctgaaatg gcggggcgag acattgggtt cgcggttcgc
 540
 gatgatcagg tgaagccgat gtcaagcaag ctgccaggga tcgatcttga aagcttgga
 600
 gagtgcgcc acgagggcga ggtggtcgc gtctttggcg gcgacggcac gatcttcga
 660
 gctgctgaat ggtcattacc tcgccacgtt cccatgattg gcgtcaacct tggccatgtc
 720
 ggttttcttg ctgagctgga gcgctccgat atggcgatc tagtgaacaa ggtgtgttcg
 780
 cgcgactaca ccgttgagga tcgcctcgtg cttaaaacca ccgtcaccga gcattccgga
 840
 caacaccgtt ggagttcttt tgccgtcaac gagttgtctc tggaaaaggc agcccgccgg
 900
 cgcattgctg acgttctggc gtctgtcgac gagttgcgg tgcaacgctg gagttgcgac
 960
 gggatcctgg tctcgacccc gaccggatcg acggcctacg cgttctcagc tggcgggccc
 1020
 gtcatgtggc ccgatctcga ccgatgctc atgggtccgt tgagcgctca cgctctcttt
 1080
 gctcgaccgc tggatcatgag cccagctgct cgagtgagcc ttgacatcca gccagacggt
 1140
 tcagaatcgg cggttctgtg gtgcgacggg cgccgatcgt gcaccgtacg accgggggaa
 1200
 agaatcaccg tcgtccgcca tcccagcgt ctgcgcattg ctgctctggc cgcgcagccc
 1260
 ttcacatcgc gtctggtcaa gaagtgtgag ctcccggtca gcgggtggcg tcagggtcgt
 1320
 gaccgtcatc acctagagga gacttcgtga tacgtagtgt gcgaattcgt ggactcggcg
 1380
 tcacgatga gacggtctc gaaccctcat ccgcgctgac ggcagtcacc ggcgagaccg
 1440
 gcgccggaaa gaccatggtg gtcaccggt
 1469

<210> 354

<211> 318

<212> PRT

<213> Homo sapiens

<400> 354

```

Met Gly Arg Tyr Cys Gly Leu Val Asn Asp Thr Ser Pro Ser Arg Tyr
 1           5           10           15
Val Val Val Val Thr His Ala Thr Arg Asp Asp Ala Phe Asp Ala Ala
      20           25           30
Ala Glu Phe Ile Ser Glu Met Ala Gly Arg Asp Ile Gly Cys Ala Val
      35           40           45
Pro Asp Asp Gln Val Lys Pro Met Ser Ser Lys Leu Pro Gly Ile Asp
      50           55           60
Leu Glu Ser Leu Gly Glu Phe Ala His Glu Ala Glu Val Val Val Val
      65           70           75           80
Phe Gly Gly Asp Gly Thr Ile Leu Arg Ala Ala Glu Trp Ser Leu Pro
      85           90           95
Arg His Val Pro Met Ile Gly Val Asn Leu Gly His Val Gly Phe Leu
      100          105          110
Ala Glu Leu Glu Arg Ser Asp Met Ala Asp Leu Val Asn Lys Val Cys
      115          120          125
Ser Arg Asp Tyr Thr Val Glu Asp Arg Leu Val Leu Lys Thr Thr Val
      130          135          140
Thr Glu His Ser Gly Gln His Arg Trp Ser Ser Phe Ala Val Asn Glu
      145          150          155          160
Leu Ser Leu Glu Lys Ala Ala Arg Arg Arg Met Leu Asp Val Leu Ala
      165          170          175
Ser Val Asp Glu Leu Pro Val Gln Arg Trp Ser Cys Asp Gly Ile Leu
      180          185          190
Val Ser Thr Pro Thr Gly Ser Thr Ala Tyr Ala Phe Ser Ala Gly Gly
      195          200          205
Pro Val Met Trp Pro Asp Leu Asp Ala Met Leu Met Val Pro Leu Ser
      210          215          220
Ala His Ala Leu Phe Ala Arg Pro Leu Val Met Ser Pro Ala Ala Arg
      225          230          235          240
Val Asp Leu Asp Ile Gln Pro Asp Gly Ser Glu Ser Ala Val Leu Trp
      245          250          255
Cys Asp Gly Arg Arg Ser Cys Thr Val Arg Pro Gly Glu Arg Ile Thr
      260          265          270
Val Val Arg His Pro Asp Arg Leu Arg Ile Ala Arg Leu Ala Ala Gln
      275          280          285
Pro Phe Thr Ser Arg Leu Val Lys Lys Phe Glu Leu Pro Val Ser Gly
      290          295          300
Trp Arg Gln Gly Arg Asp Arg His His Leu Glu Thr Ser
      305          310          315

```

<210> 355

<211> 558

<212> DNA

<213> Homo sapiens

<400> 355

```

nggattccac ctcttggaaat ggaaccac ataccagttc tcttctcga tttgaatgag
60
gatgacctca gtgccaatga gcagcttgtt ggcccccatg catccggcgt gaaactccatc
120

```

ctgccaagg agcatggcag ccagtttttc tacctgcccc tcataaagca cagtgatgat
 180
 gaggtttcag ccacagcctc ttgggattcc tcggtgcatg attctgttca ctggaatggg
 240
 gtcacaccac agaataaaag gatttaccta attgtgaaaa ccacagtcca actcagccac
 300
 cctgctgcta tggagttagt attacgaaaa cgaattgcag ccaatattta caacaacagg
 360
 agtttcacgc agagtttgaa gaggagaata tccttgaaaa atatatttta ttctgtgggt
 420
 gtaacctatg aaatagtatc caatatacca aaggcaactg aggagataga ggaccgggaa
 480
 acgctggctc tcctggcagc aaggagttaa aacgaaggca catcagatgg gaagacgtac
 540
 attgagaagt acactcga
 558

<210> 356

<211> 186

<212> PRT

<213> Homo sapiens

<400> 356

Xaa	Ile	Pro	Pro	Gly	Met	Glu	Thr	His	Ile	Pro	Val	Leu	Phe	Leu
1			5					10					15	
Asp	Leu	Asn	Ala	Asp	Leu	Ser	Ala	Asn	Glu	Gln	Leu	Val	Gly	Pro
		20					25					30		
His	Ala	Ser	Gly	Val	Asn	Ser	Ile	Leu	Pro	Lys	Glu	His	Gly	Ser
		35					40				45			
Phe	Phe	Tyr	Leu	Pro	Ile	Ile	Lys	His	Ser	Asp	Asp	Glu	Val	Ser
	50					55				60				
Thr	Ala	Ser	Trp	Asp	Ser	Ser	Val	His	Asp	Ser	Val	His	Leu	Asn
65				70					75					80
Val	Thr	Pro	Gln	Asn	Glu	Arg	Ile	Tyr	Leu	Ile	Val	Lys	Thr	Thr
			85					90						95
Gln	Leu	Ser	His	Pro	Ala	Ala	Met	Glu	Leu	Val	Leu	Arg	Lys	Arg
		100						105				110		
Ala	Ala	Asn	Ile	Tyr	Asn	Lys	Gln	Ser	Phe	Thr	Gln	Ser	Leu	Lys
		115				120					125			
Arg	Ile	Ser	Leu	Lys	Asn	Ile	Phe	Tyr	Ser	Cys	Gly	Val	Thr	Tyr
	130				135					140				
Ile	Val	Ser	Asn	Ile	Pro	Lys	Ala	Thr	Glu	Glu	Ile	Glu	Asp	Arg
145			150						155					160
Thr	Leu	Ala	Leu	Leu	Ala	Ala	Arg	Ser	Glu	Asn	Glu	Gly	Thr	Ser
			165						170					175
Gly	Lys	Thr	Tyr	Ile	Glu	Lys	Tyr	Thr	Arg					
			180					185						

<210> 357

<211> 323

<212> DNA

<213> Homo sapiens

<400> 357

acgcgtgcgt gtgtgtgtgt agtcgggtgt gtgcatgcgt gtgggtgtgc agcaggtggg
 60
 gtacgatcag gctgaaggct gatcaggcac aaggctcttg gggagagccc tggttccagc
 120
 cctgggggtca gagcagcagg ggccagaaag acggcagggg tgagcactgc acccgctggg
 180
 cagggcaggg ccacagaagg cagggcatgg aggccactgt aagggtctga cagagtggat
 240
 ggatgtctcc ggaagcacct gcgtggccca gtcagcagga tcagactcgc atgtgtcagg
 300
 gtcaccatgg gtcagcgagg atn
 323

<210> 358

<211> 102

<212> PRT

<213> Homo sapiens

<400> 358

Met	Val	Thr	Leu	Thr	His	Ala	Ser	Leu	Ile	Leu	Leu	Thr	Gly	Pro	Arg
1				5					10					15	
Arg	Cys	Phe	Arg	Arg	His	Pro	Ser	Thr	Leu	Ser	Ser	Pro	Ser	Arg	Gly
		20						25					30		
Leu	His	Ala	Leu	Pro	Ser	Val	Ala	Leu	Pro	Cys	Pro	Ala	Gly	Ala	Val
		35					40					45			
Leu	Thr	Pro	Ala	Val	Phe	Leu	Ala	Pro	Ala	Ala	Leu	Thr	Pro	Gly	Leu
		50				55					60				
Glu	Pro	Gly	Leu	Ser	Pro	Arg	Ala	Leu	Cys	Leu	Ile	Ser	Leu	Gln	Pro
		65			70				75					80	
Asp	Arg	Thr	Pro	Pro	Ala	Ala	His	Pro	His	Ala	Cys	Thr	His	Pro	Thr
			85					90						95	
His	Thr	Thr	His	Ala	Arg										
					100										

<210> 359

<211> 265

<212> DNA

<213> Homo sapiens

<400> 359

acgcgtaccg acaagcgccc ggtgatggcc gaccttcgcg aatcgggcgc aatcgagcag
 60
 gatcgggaca tgatcgtctt catctaccgc gacgattact acaacaagga aaattcgccg
 120
 gacaaggggc tggccgagat catcatcggc aagcatcggg gggggccac cggtcgtgc
 180
 aagctgaagt tcttcggcga gtacaccctg ttcgacaacc tggcccaaa ctcggttggt
 240
 tcgttcgaat aacggatgat tccgg
 265

<210> 360

<211> 83

<212> PRT

<213> Homo sapiens

<400> 360

```

Thr Arg Thr Asp Lys Arg Pro Val Met Ala Asp Leu Arg Glu Ser Gly
 1           5           10           15
Ala Ile Glu Gln Asp Ala Asp Met Ile Val Phe Ile Tyr Arg Asp Asp
          20           25           30
Tyr Tyr Asn Lys Glu Asn Ser Pro Asp Lys Gly Leu Ala Glu Ile Ile
          35           40           45
Ile Gly Lys His Arg Gly Gly Pro Thr Gly Ser Cys Lys Leu Lys Phe
          50           55           60
Phe Gly Glu Tyr Thr Arg Phe Asp Asn Leu Ala His Asn Ser Val Gly
          65           70           75           80
Ser Phe Glu

```

<210> 361

<211> 453

<212> DNA

<213> Homo sapiens

<400> 361

```

gctttgcagg aggaatctc tatctctggc tgcaagatga ggctgagcta cctgagcagc
60
cggaccacctg gctacaaatc tgtcctgagg atcagcctca cccaccggac catcccccttc
120
aacctcatga aggtgcacct catggttagcg gtggagggcc gcctcttcag gaagtgggttc
180
gctgcagccc cagacctgtc ctattatttc atttgggaca agacagacgt ctacaaccag
240
aaggtggttg ggctttcaga agcctttgtt tccgtggggt atgaatatga atcctgccca
300
gatctaattc tgtgggaaaa aagaacaaca gtgctgcagg gctatgaaat tgacgcgtcc
360
aagcttggag gatggagcct agacaacat catgccctca acattcaaag tggcatcctg
420
cacaagggga atgngagaa ccagtttgtg tct
453

```

<210> 362

<211> 151

<212> PRT

<213> Homo sapiens

<400> 362

```

Ala Leu Gln Glu Glu Ile Ser Ile Ser Gly Cys Lys Met Arg Leu Ser
 1           5           10           15
Tyr Leu Ser Ser Arg Thr Pro Gly Tyr Lys Ser Val Leu Arg Ile Ser
          20           25           30
Leu Thr His Pro Thr Ile Pro Phe Asn Leu Met Lys Val His Leu Met
          35           40           45
Val Ala Val Glu Gly Arg Leu Phe Arg Lys Trp Phe Ala Ala Ala Pro
          50           55           60
Asp Leu Ser Tyr Tyr Phe Ile Trp Asp Lys Thr Asp Val Tyr Asn Gln

```

```

65              70              75              80
Lys Val Phe Gly Leu Ser Glu Ala Phe Val Ser Val Gly Tyr Glu Tyr
      85              90              95
Glu Ser Cys Pro Asp Leu Ile Leu Trp Glu Lys Arg Thr Thr Val Leu
      100             105             110
Gln Gly Tyr Glu Ile Asp Ala Ser Lys Leu Gly Gly Trp Ser Leu Asp
      115             120             125
Lys His His Ala Leu Asn Ile Gln Ser Gly Ile Leu His Lys Gly Asn
      130             135             140
Gly Glu Asn Gln Phe Val Ser
145              150

```

```

<210> 363
<211> 502
<212> DNA
<213> Homo sapiens

```

```

<400> 363
gggtacacaaa aagtttgcca cagtattcac actccagggtc tccataaacc ttccagatcc
60
gctcacacaa gctggtgttc atttgcttct tctgtaaact gttcaggacc ttcataaaa
120
cggtgatgcc tgaccggtgc tcaggggcag ctttgcaaga gtcagggtga tgtgtgatgg
180
tgtccccacc accagctact ggagggagga ggtctgaggg ctcagctggg tttgacctga
240
gacacctgct gggatctggg tcaccagctg aaagcacagc catgtttctgc ccttccccca
300
gggggctctg ggcgccatgg ctttctctgat ctgaccagc actctggggc ttggacagca
360
gtagtgtgat cacttcacct tgcgtctgga ctgagcttct gtgctgcatg tctgggggct
420
tctcaggagc agcatgagcc tctgcggagg aggtatcatt tttaacaaa aaatcatctg
480
aaaccacctc ttgagaatgc ag
502

```

```

<210> 364
<211> 136
<212> PRT
<213> Homo sapiens

```

```

<400> 364
Met Gln His Arg Ser Ser Val Gln Thr Gln Gly Glu Val Ile Thr Leu
1      5      10      15
Leu Leu Ser Lys Ala Gln Ser Ala Gly Ser Asp Gln Glu Ser His Gly
20     25     30
Ala Gln Ser Pro Leu Gly Glu Gly Gln Asn Met Ala Val Leu Ser Ala
35     40     45
Gly Asp Pro Asp Pro Ser Arg Cys Leu Arg Ser Asn Pro Ala Glu Ala
50     55     60
Ser Asp Leu Leu Pro Pro Val Ala Gly Gly Gly Asp Thr Ile Thr His
65     70     75     80
Gln Pro Asp Ser Cys Lys Ala Ala Pro Glu His Arg Ser Gly Ile Thr

```

```

      85              90              95
Ala Phe Met Lys Val Leu Asn Ser Leu Gln Lys Lys Gln Met Asn Thr
      100              105              110
Ser Leu Cys Glu Arg Ile Trp Lys Val Tyr Gly Asp Leu Glu Cys Glu
      115              120              125
Tyr Cys Gly Lys Leu Phe Trp Tyr
      130              135

```

<210> 365
 <211> 333
 <212> DNA
 <213> Homo sapiens

```

<400> 365
atctcaacgg atgcatccat caaggagatg atccccccag gtgctcttgt tatgctcaca
60
ccactgatcg ttgggattct atttgggggt gagaccctct ctggagtctc tgctgggtgcc
120
cttgtctctg gtgttcagat tgccatttct gcatccaaca ctgggtggtgc ctgggacaac
180
gcccaagaagt acattgaggc tggagtttca gagcatgccca ggacccttgg cccaaaaggt
240
tctgaccctc acaaggcggc tgtcattggt gacaccattg gagatcctct caaggacacg
300
tctggccctt ccctcaacat cctcatcaag ctt
333

```

<210> 366
 <211> 111
 <212> PRT
 <213> Homo sapiens

```

<400> 366
Ile Ser Thr Asp Ala Ser Ile Lys Glu Met Ile Pro Pro Gly Ala Leu
1      5      10      15
Val Met Leu Thr Pro Leu Ile Val Gly Ile Leu Phe Gly Val Glu Thr
      20      25      30
Leu Ser Gly Val Leu Ala Gly Ala Leu Val Ser Gly Val Gln Ile Ala
      35      40      45
Ile Ser Ala Ser Asn Thr Gly Gly Ala Trp Asp Asn Ala Lys Lys Tyr
      50      55      60
Ile Glu Ala Gly Val Ser Glu His Ala Arg Thr Leu Gly Pro Lys Gly
65      70      75      80
Ser Asp Pro His Lys Ala Ala Val Ile Gly Asp Thr Ile Gly Asp Pro
      85      90      95
Leu Lys Asp Thr Ser Gly Pro Ser Leu Asn Ile Leu Ile Lys Leu
      100      105      110

```

<210> 367
 <211> 381
 <212> DNA
 <213> Homo sapiens

<400> 367

gcgttcgtcg cactaccg cgccggcgga acccttgacg agctactcga agcatggaca
60
tggcagcagc tcggtgtaca cagcaaaccc gtgngccttg tacgactcga cnncttctgg
120
gcaccgctga ccgcgctact caaccacatg accatcgaaa gtttcattcg ccttgaggac
180
cgccgctcgc tcgtgatcgc cgataccata catcagctga tggccgatct tgagggatgg
240
acccaccacc caccgaagtg gcgctcgtga catagaacaa atgattctga ctatggctca
300
ttgacatctg cgcagcggct actagctcca ttgacttcaa atcgggcctt ggccgaggct
360
cngttcaggt ggcccgaat g
381

<210> 368

<211> 89

<212> PRT

<213> Homo sapiens

<400> 368

Ala	Phe	Val	Ala	Leu	Pro	Gly	Gly	Gly	Gly	Thr	Leu	Asp	Glu	Leu	Leu
1				5					10				15		
Glu	Ala	Trp	Thr	Trp	Gln	Gln	Leu	Gly	Val	His	Ser	Lys	Pro	Val	Xaa
			20					25					30		
Leu	Val	Arg	Leu	Asp	Xaa	Phe	Trp	Ala	Pro	Leu	Thr	Ala	Leu	Leu	Asn
			35				40					45			
His	Met	Thr	Ile	Glu	Ser	Phe	Ile	Arg	Pro	Glu	Asp	Arg	Ala	Ser	Leu
	50					55					60				
Val	Ile	Ala	Asp	Thr	Ile	His	Gln	Leu	Met	Ala	Asp	Leu	Glu	Gly	Trp
65					70					75				80	
Thr	Pro	Pro	Pro	Pro	Lys	Trp	Arg	Ser							
					85										

<210> 369

<211> 313

<212> DNA

<213> Homo sapiens

<400> 369

gatacatgat cctctcatat cgcacacaca ccgctccctt ctgcgcgaat tcgcagacaa
60
acttgccgag gcttcacagc aagccgtcaa ggctgcttcc tgtgggctac cgatagttctc
120
gtacgcgagt tctcggacat caacgccaac gtcgggcaag atactgtcaa cgccatctac
180
acattctacg agcagcaagc gaccagtttc cttcgccagc tgaacgacct cccaccggaa
240
gagcttcccg acgtcatcga ggactttctc cgctgtcca ctgatgtcct tctttaccat
300
ttccageaag ctt
313

<210> 370

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 370
 Ser Ser His Thr Ala His Thr Pro Leu Pro Ser Ala Ala Ile Arg Arg
 1 5 10 15
 Gln Thr Cys Ala Gly Phe Thr Ala Ser Arg Gln Gly Cys Phe Leu Trp
 20 25 30
 Ala Thr Asp Ser Leu Val Arg Glu Phe Ser Asp Ile Asn Ala Asn Val
 35 40 45
 Gly Gln Asp Thr Val Asn Ala Ile Tyr Thr Phe Tyr Glu Gln Gln Ala
 50 55 60
 Thr Ser Phe Leu Arg Gln Leu Asn Asp Leu Pro Glu Glu Leu Pro
 65 70 75 80
 Asp Val Ile Glu Asp Phe Phe Arg Leu Ser Thr Asp Val Leu Tyr
 85 90 95
 His Phe Gln Gln Ala
 100

<210> 371
 <211> 380
 <212> DNA
 <213> Homo sapiens

<400> 371
 atgacgggtc acgtcatcct ggcgattcca cagggtgggtga cgtcatggat cggccctcatc
 60
 tgcgatcgcca ttggcacggg ctttatcaag ccgaacctct ccacgggtgt aggaggctctt
 120
 tacgatgacg gtgacccccg ccgcatcag ggtttcctgt acttctacat gtcgatcagt
 180
 attggatctc tcttcgcgcc gatcgctcacc ggcctcctca aggaccatta cggtaccacc
 240
 gtagggttca ttgccgtgc tatcggtatg gctctgggtc tgatcgccctt ctteccaggt
 300
 cgttccaaac tgcgtgagct cgccttcgac atcccaatc cgctggcccc cggcgagggt
 360
 cgccggatgg tgctccgcgg
 380

<210> 372
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 372
 Met Thr Gly His Val Ile Leu Ala Ile Pro Gln Val Val Thr Ser Trp
 1 5 10 15
 Ile Gly Leu Ile Cys Ile Ala Ile Gly Thr Gly Phe Ile Lys Pro Asn
 20 25 30
 Leu Ser Thr Val Val Gly Gly Leu Tyr Asp Asp Gly Asp Pro Arg Arg
 35 40 45
 Asp Gln Gly Phe Leu Tyr Phe Tyr Met Ser Ile Ser Ile Gly Ser Leu

```

      50              55              60
Phe Ala Pro Ile Val Thr Gly Leu Leu Lys Asp His Tyr Gly Tyr His
65              70              75              80
Val Gly Phe Ile Ala Ala Ala Ile Gly Met Ala Leu Gly Leu Ile Ala
      85              90              95
Phe Phe His Gly Arg Ser Lys Leu Arg Glu Leu Ala Phe Asp Ile Pro
      100              105              110
Asn Pro Leu Ala Pro Gly Glu Gly Arg Arg Met Val Leu Arg
      115              120              125

```

<210> 373

<211> 475

<212> DNA

<213> Homo sapiens

<400> 373

```

acatgttgga aaaattgcct ccactctcgg tgctacaggt atgaatctca gccacagtga
60
tgactgtggc agctacaggc ctgatgaaca cccaccaag aaaaggagca tcactgtgcct
120
gcttctctct ggttctctaaa tcctttggcc aaacattttc cccacaaccc tccactccag
180
ttggctgggc actgcctctc agaaagaagt ccaggttccc tgcagcccc agagcgctcg
240
catggactct gccactgtc cettccaac acggaggccc ccaattctgg ggaccctac
300
accctaccct gtaccaccac atcccatgc ctgctccaga cagcactaac ctcccatgac
360
agtgggacca aagcagttct taaaggtcca atccactcag ttcttaaagt aaaaacagtt
420
gcccatgagt ccccccaaa gacgtccgca catatgccaa acattcggtg tgcac
475

```

<210> 374

<211> 109

<212> PRT

<213> Homo sapiens

<400> 374

```

Met Gly Met Trp Trp Tyr Arg Val Gly Cys Arg Gly Pro Gln Asn Trp
1              5              10              15
Gly Pro Pro Cys Trp Lys Gly Thr Val Gly Arg Val His Ala Gly Ala
      20              25              30
Leu Gly Leu Thr Gly Thr Trp Asp Phe Phe Leu Arg Gly Ser Asp Gln
      35              40              45
Pro Thr Gly Val Glu Gly Cys Gly Glu Asn Val Trp Pro Lys Asp Leu
      50              55              60
Gly Thr Arg Glu Lys Gln Ala His Asp Ala Pro Phe Leu Gly Gly Val
      65              70              75              80
Phe Ile Arg Pro Val Ala Ala Thr Val Ile Thr Val Ala Glu Ile His
      85              90              95
Thr Cys Ser Thr Arg Val Gly Gly Asn Phe Ser Asn Met
      100              105

```

<210> 375

<211> 332

<212> DNA

<213> Homo sapiens

<400> 375

```

nnacgcgtcg cctccacctc gaaacccgcc ggcggtcggt ttttcacat ggccgaccgc
60
aaggecccaag ttgcgacggt caccggacacg ctgtatttca cgccgtcgca atgggatgga
120
tgcatggcac ggatgcgtgg ggataagata tcagcactga agtggaatca gatgcagatg
180
gcggcatgct cttcatagc ggacgtgggt gcgaagctgg gctgcccgca gcgcactatg
240
ggcacggcgc agctgctgta ccagcgtttc catctatttc atgcgccgac tgagttttcg
300
ttacatgagg tggctttgac gtgtctcttc ac
332

```

<210> 376

<211> 110

<212> PRT

<213> Homo sapiens

<400> 376

```

Xaa Arg Val Ala Ser Thr Ser Lys Pro Ala Gly Gly Arg Phe Phe Thr
1      5      10      15
Met Ala Asp Arg Lys Ala Gln Val Ala Thr Val Thr Asp Thr Leu Tyr
20     25     30
Phe Thr Pro Ser Gln Trp Asp Gly Cys Met Ala Arg Met Arg Gly Asp
35     40     45
Lys Ile Ser Ala Leu Lys Trp Asn Gln Met Gln Met Ala Ala Cys Ser
50     55     60
Phe Ile Ala Ala Val Gly Ala Lys Leu Gly Cys Pro Gln Arg Thr Met
65     70     75     80
Gly Thr Ala Gln Leu Leu Tyr Gln Arg Phe His Leu Phe His Ala Pro
85     90     95
Thr Glu Phe Ser Leu His Glu Val Ala Leu Thr Cys Leu Phe
100    105    110

```

<210> 377

<211> 369

<212> DNA

<213> Homo sapiens

<400> 377

```

cgcggtgccag gtatgtcaac tgatctgtcg gatatttcog aggttgagta ccgtcaactg
60
aggctggaac gagtggtgct gtgttcgggt tggactcagg gaactgccgc agacgccgag
120
aacgctatgg cggagctgaa agcccttget gaaacggcgg gatctcagggt actcgaagct
180
gtcatgcaac gtcggactac cccggatccg gcgacgtaca ttggttcggg caaggtggct
240

```

gagcttgccg aggtggtgcg ggcgactggt gccgatactg tcatttgtga cgggtaactt
 300
 gacgcgcgtc agttgcgcaa cctcgaggat cgggtcaagn gcaaagtgtt ggaccggtcg
 360
 gtctgattc
 369

<210> 378
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 378
 Arg Val Pro Gly Met Ser Thr Asp Leu Ser Asp Ile Ser Glu Val Glu
 1 5 10 15
 Tyr Arg Gln Leu Arg Leu Glu Arg Val Val Leu Cys Ser Val Trp Thr
 20 25 30
 Gln Gly Thr Ala Ala Asp Ala Glu Asn Ala Met Ala Glu Leu Lys Ala
 35 40 45
 Leu Ala Glu Thr Ala Gly Ser Gln Val Leu Glu Ala Val Met Gln Arg
 50 55 60
 Arg Thr Thr Pro Asp Pro Ala Thr Tyr Ile Gly Ser Gly Lys Val Ala
 65 70 75 80
 Glu Leu Ala Glu Val Val Arg Ala Thr Gly Ala Asp Thr Val Ile Cys
 85 90 95
 Asp Gly Glu Leu Asp Ala Ala Gln Leu Arg Asn Leu Glu Asp Arg Val
 100 105 110
 Lys Xaa Lys Val Val Asp Arg Ser Val
 115 120

<210> 379
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 379
 acgcgttact taaacttatt tgtaaataat aaattcatta tttctagtgt gttagggtact
 60
 atgggctgtg gttaccagg tgctatggca gctaaaattg cttattccaaa ccgtcaagca
 120
 gtagctatca caggcgacgg tgcgttccaa atggtaatgc aagactttgc tacagctgtt
 180
 caatataact taccaatgac aatctttgta ttaaataaca aacaattgtc attcattaaa
 240
 tatgaacaac aagctgctgg tgaattagag tatgccattg atttctctga tatggatcat
 300
 gctaaatttg ctgaagctgc tgggtggtaaa ggctatgttg tgagagatgt aagtcgtctt
 360
 gacgacatcg ttgaagaggc aatggctcaa gatgttccaa caatcgtt
 408

<210> 380
 <211> 136
 <212> PRT

<213> Homo sapiens

<400> 380

```

Thr Arg Tyr Leu Asn Leu Ser Val Asn Asn Lys Phe Ile Ile Ser Ser
 1           5           10           15
Trp Leu Gly Thr Met Gly Cys Gly Leu Pro Gly Ala Met Ala Ala Lys
      20           25           30
Ile Ala Tyr Pro Asn Arg Gln Ala Val Ala Ile Thr Gly Asp Gly Ala
      35           40           45
Phe Gln Met Val Met Gln Asp Phe Ala Thr Ala Val Gln Tyr Asn Leu
      50           55           60
Pro Met Thr Ile Phe Val Leu Asn Asn Lys Gln Leu Ser Phe Ile Lys
      65           70           75           80
Tyr Glu Gln Gln Ala Ala Gly Glu Leu Glu Tyr Ala Ile Asp Phe Ser
      85           90           95
Asp Met Asp His Ala Lys Phe Ala Glu Ala Ala Gly Gly Lys Gly Tyr
      100          105          110
Val Val Arg Asp Val Ser Arg Leu Asp Asp Ile Val Glu Glu Ala Met
      115          120          125
Ala Gln Asp Val Pro Thr Ile Val
      130          135

```

<210> 381

<211> 613

<212> DNA

<213> Homo sapiens

<400> 381

```

naccggtcat aggcgggccc agtggaagac cacgccaaca cagttggttg agatccgcgt
60
tgaggggcaag gtctctgcgcg tcccgcgaaa tctgggtcaag gcctaccact ctggggtgat
120
cgacgtcgcg gactgaaccc tgggagcctg ggcgggtccag catgactgct caggctcatt
180
acccaaacgc gtcgatcccc taggggtgtc gtcgatgagca agccccgaagt gacctgccc
240
gattccgccc ccgacgacct cgtcgttgag gacatcacca tcggcgacgg ccctgaagcg
300
tccgctggca acctcgtcga agtcactac gtcggcggtgg ccttaagcaa tggctcgtgag
360
ttcgattctt cctggaaccg cggggagccg ctgaccttcc aactaggggc tggccaggtg
420
atccccgagt gggatgaagg tgtccaaggt atgaaggctg gtggacgacg caaactcgtc
480
atccccacc accttgctta cggtcgcaa ggaatctccg gtgtgatcgc tggcggtgag
540
acgtggtct tcgtctcga ccttgctaac atcatctgac gtgacccccg ctcaagcagt
600
cttcgcgcc ggg
613

```

<210> 382

<211> 137

<212> PRT

<213> Homo sapiens

<400> 382

```

Leu Leu Arg Leu Ile Thr Lys Thr Arg Arg Ser Arg Arg Val Val Val
 1           5           10           15
Met Ser Lys Pro Glu Val Thr Leu Pro Asp Ser Ala Pro Asp Asp Leu
      20           25           30
Val Val Glu Asp Ile Thr Ile Gly Asp Gly Pro Glu Ala Ser Ala Gly
      35           40           45
Asn Leu Val Glu Val His Tyr Val Gly Val Ala Leu Ser Asn Gly Arg
      50           55           60
Glu Phe Asp Ser Ser Trp Asn Arg Gly Glu Pro Leu Thr Phe Gln Leu
      65           70           75           80
Gly Ala Gly Gln Val Ile Pro Glu Trp Asp Glu Gly Val Gln Gly Met
      85           90           95
Lys Val Gly Gly Arg Arg Lys Leu Val Ile Pro His His Leu Ala Tyr
      100          105          110
Gly Pro Gln Gly Ile Ser Gly Val Ile Ala Gly Gly Glu Thr Leu Val
      115          120          125
Phe Val Cys Asp Leu Val Asn Ile Ile
      130          135

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<210> 383

<211> 352

<212> DNA

<213> Homo sapiens

<400> 383

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ttgccaaaga gatgccagct tcttcgaact actgctgtgc aactcttcat gttcaaaacc
120
cagttttctg tttttcacac ctgaacatac acccccctgc agttgggtgg ctccccggtt
180
accagctggg ctctatctac agagagagca atggcttccc ttcccttgaa ggaagtctca
240
ccctcacaag gacacttgat ccgctgcaaa gcagaaaagtg tgcggaccct ttgggaaggg
300
cgttcttttc ttgttttagaa cctaggattc tgtttttccc aaacaggatc an
352

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<210> 384

<211> 93

<212> PRT

<213> Homo sapiens

<400> 384

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Met Pro Ala Ser Ser Asn Tyr Cys Cys Ala Thr Leu His Val Gln Asn
 1           5           10           15
Pro Val Phe Cys Phe Ser His Leu Asn Ile His Pro Pro Ala Val Gly
      20           25           30
Trp Leu Pro Arg Tyr Gln Leu Gly Ser Ile Tyr Arg Glu Ser Asn Gly
      35           40           45
Phe Pro Ser Leu Glu Gly Ser Leu Thr Leu Thr Arg Thr Leu Asp Pro

```

```

      50              55              60
Leu Gln Ser Arg Lys Cys Ala Asp Pro Leu Gly Arg Ala Phe Phe Ser
65              70              75              80
Cys Leu Glu Pro Arg Ile Leu Phe Phe Pro Asn Arg Ile
      85              90

```

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<210> 385
<211> 342
<212> DNA
<213> Homo sapiens

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<400> 385
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60
gcacctcggg caatgtcctg ggcctgactg gcacacgcaa tcaaagcgag caacaacaca
120
caaaaacgca tcatgaggca gacgccaggg aagtgcaga agccgcagca ggcgcgcggc
180
gattggaaat atcggtgagg ctaatgggtca ccagcgcttg caggttgat tcggtggcca
240
attcggcgaa cgacagcacc gccagttcca gtcgcgcgcg cagcaccagg cgacgcaagc
300
tgcggcgcaa ctccgggtgc accaacaaca ccgcactgtt ca
342

```

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<210> 386
<211> 109
<212> PRT
<213> Homo sapiens

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```

<400> 386
Met Gln Asn Ala Pro Phe Thr Gly Arg Gln Val Asp Arg Ala Ala Ser
1      5      10      15
Thr Ser Gly Asn Val Leu Gly Leu Thr Gly Thr Arg Asn Gln Ser Glu
20      25      30
Gln Gln His Thr Lys Thr His His Glu Ala Asp Ala Arg Glu Val Thr
35      40      45
Glu Ala Ala Ala Gly Ala Arg Arg Leu Glu Ile Ser Val Arg Leu Met
50      55      60
Val Thr Ser Ala Cys Arg Leu Tyr Ser Val Ala Asn Ser Arg Asn Asp
65      70      75      80
Ser Thr Ala Ser Ser Ser Pro Arg Ser Thr Arg Arg Arg Lys Leu
85      90      95
Arg Arg Asn Ser Gly Cys Thr Asn Asn Thr Ala Leu Phe
100      105

```

```

<210> 387
<211> 379
<212> DNA
<213> Homo sapiens

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<400> 387
acgcgtgacg cgccggcatc ggaagcgcttg actgcagaga agaccgcgca cgtggctgtg
60

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ggacgtgctg gcacgtctga catggtgcgt ggaccgcct tctcttcgcc tgcgcatgcc
 120
 atgcaagagg agcttgacaa tgtgcgtgat ctgcgccatg cgcggcagca agcgcctgat
 180
 gctgttcggt cagagctgct cgaagcgcag caagcatgtg cctcgtgccca gctgcagctg
 240
 cagcatgtgc cagatgatcg tgtgcgagcg catcccatat accaggcgct ccatgcggac
 300
 gttgcttaca tgcagcaaga acttgatcac gtacgagacg cattggcttc ggcagaatct
 360
 gagaatgcga gcttcgcgcg
 379

<210> 388

<211> 114

<212> PRT

<213> Homo sapiens

<400> 388

Met Arg Leu Val Arg Asp Gln Val Leu Ala Ala Cys Lys Gln Arg Pro
 1 5 10 15
 His Gly Ala Pro Gly Ile Trp Asp Ala Leu Ala His Asp His Leu Ala
 20 25 30
 His Ala Ala Ala Ala Gly Thr Arg His Met Leu Ala Ala Leu Arg
 35 40 45
 Ala Ala Arg Asn Glu Gln His Arg Ala Leu Ala Ala His Gly Arg
 50 55 60
 Asp His Ala His Cys Gln Ala Pro Leu Ala Trp His Ala Gln Ala Lys
 65 70 75 80
 Arg Arg Arg Val His Ala Pro Cys Gln Thr Cys Gln His Val Pro Gln
 85 90 95
 Pro Arg Ala Arg Ser Ser Leu Gln Ser Thr Leu Pro Met Pro Ala Arg
 100 105 110
 His Ala

<210> 389

<211> 382

<212> DNA

<213> Homo sapiens

<400> 389

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 ggccctcccaac gtgctccgca accctccgaa gcgatgacct ggcccggggg cggaacagag
 120
 gtatttcggt tggagacgct tgggggtcaat tacgggccagg tgcgcgccgt cgatgccctg
 180
 acgaccaccg tagagcgcgg caccatcacc tgccctcatgg gtcgaaatgg atcaggcaag
 240
 tcgtctctga tgtgggcgat ccaaggggca acaaagtcct caggaggggg actggtcaac
 300
 cagcagggtt cttgggctga cccccgaaa gccgacgcgc cgaccgctcg acgaatggtg
 360

agcttagtcc cgcagtcagc cn
382

<210> 390
<211> 127
<212> PRT
<213> Homo sapiens

<400> 390
Xaa Trp Pro Thr Val Pro Leu Ser Val Arg Glu Ala Arg Arg Arg Val
1 5 10 15
Gly Pro Arg Pro Gly Leu Pro Arg Ala Pro Gln Pro Ser Glu Ala Met
20 25 30
Thr Trp Pro Gly Gly Asn Glu Val Leu Arg Leu Glu Thr Leu Gly
35 40 45
Val Asn Tyr Gly Gln Val Arg Ala Val Asp Ala Leu Thr Thr Thr Val
50 55 60
Glu Arg Gly Thr Ile Thr Cys Leu Met Gly Arg Asn Gly Ser Gly Lys
65 70 75 80
Ser Ser Leu Met Trp Ala Ile Gln Gly Ala Thr Lys Ser Ser Gly Arg
85 90 95
Val Leu Val Asn His Glu Gly Ser Trp Ala Asp Pro Arg Lys Ala Asp
100 105 110
Ala Ala Thr Ala Arg Arg Met Val Ser Leu Val Pro Gln Ser Ala
115 120 125

<210> 391
<211> 456
<212> DNA
<213> Homo sapiens

<400> 391
nnacgcgttg ccgctctgtg aggcgcctat cacggtgaca ctctcggtgc tatgagcgtg
60
tgcgacccta tcggtggcat gcacgcctntg ttcagcgact ctattcccca gcagatcttc
120
ctgcccgcgc cctccttctt tcgcccgcga cgaggccgac gtggagacgt ggtgcagcga
180
ggccgatgaa tcctggacac ccaccgcgac gacctggcgc ggatcattgt cgagcccatc
240
ttgcaaggag ccggaggcat gtggccgttg tctccgtcct gtctgaagca cctgcgcctg
300
cgtgctgatg aacttgacct agttcttata gccagcaggg tcgctactgg atttgggcgg
360
actggcaaac ttttcgcatg cgagtgggccc gatatcggtc ctgacatcat ggtggttggg
420
aaatccatga ctggcggata cctgaccag tcggcc
456

<210> 392
<211> 55
<212> PRT
<213> Homo sapiens

<400> 392

Gly Ala Tyr His Gly Asp Thr Leu Gly Ala Met Ser Val Cys Asp Pro
 1 5 10 15
 Ile Gly Gly Met His Ala Xaa Phe Ser Asp Ser Ile Pro Gln Gln Ile
 20 25 30
 Phe Leu Pro Ala Pro Ser Phe Phe Arg Arg Arg Gly Arg Arg Gly
 35 40 45
 Asp Val Val Gln Arg Gly Arg
 50 55

<210> 393

<211> 371

<212> DNA

<213> Homo sapiens

<400> 393

nacgcgttgc tcgctattgg ttgctactcg gcctacgaag gtatctacac catgatgact
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 gagcgggacc ggtacccggc ttcccgattt ccgacggtgt gcatccccgc ttctatcgac
 120
 aacaacctcc ccggttcgga actgtccatc ggcaccgaca ccgctctcaa cgtcatcgtc
 180
 gaggcgatgg acaagattaa ggagtcgggt atcgcgtcca gacgctgctt cgctcgctgag
 240
 acgatgggtc gtgactgcgg atacctcgcg ttgatgtcgg gtatcgcagc tggcgctgag
 300
 cggatctata ccaacgagga cggtatctcc ctggacgac tagccaacga cgtccattgg
 360
 ttgcgggagt c
 371

<210> 394

<211> 123

<212> PRT

<213> Homo sapiens

<400> 394

Xaa Ala Leu Leu Val Ile Gly Gly Tyr Ser Ala Tyr Glu Gly Ile Tyr
 1 5 10 15
 Thr Met Met Thr Glu Arg Asp Arg Tyr Pro Ala Phe Arg Ile Pro Thr
 20 25 30
 Val Cys Ile Pro Ala Ser Ile Asp Asn Asn Leu Pro Gly Ser Glu Leu
 35 40 45
 Ser Ile Gly Thr Asp Thr Ala Leu Asn Val Ile Val Glu Ala Met Asp
 50 55 60
 Lys Ile Lys Glu Ser Gly Ile Ala Ser Arg Arg Cys Phe Val Val Glu
 65 70 75 80
 Thr Met Gly Arg Asp Cys Gly Tyr Leu Ala Leu Met Ser Gly Ile Ala
 85 90 95
 Ala Gly Ala Glu Arg Ile Tyr Thr Asn Glu Asp Gly Ile Ser Leu Asp
 100 105 110
 Asp Leu Ala Asn Asp Val His Trp Leu Arg Glu
 115 120

<210> 395

<211> 351

<212> DNA

<213> Homo sapiens

<400> 395

gaattcttagt tgggagattc attgaccaga cttttggaat aaacactagt catcatgcta
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gcgacaggtg gtcttgtgca tggtagaaa gacgtccaag cctatgtctc tgaacctgtc
120
tctcatttct gttttctact ttacgattta tggtatctca tactcccat gttgcctgtt
180
ctccagtttt tttacttgtg ttatttccat tcttctattc ctgctcaatt tctgcctcag
240
ggcagaattg tgtccaacag ctcttaaatg cagcgcagaa actgtgatgt taaaaacatc
300
ttgttatccg gccccaaaac atgttgcctc tggtaactct tactgggttg t
351

<210> 396

<211> 90

<212> PRT

<213> Homo sapiens

<400> 396

Met	Val	Glu	Arg	Gln	Ser	Lys	Pro	Met	Ser	Leu	Lys	Pro	Ala	Leu	Ile
1				5					10					15	
Ser	Val	Phe	Tyr	Phe	Thr	Ile	Tyr	Val	Ile	Ser	Tyr	Ser	Pro	Cys	Cys
			20					25					30		
Leu	Phe	Ser	Ser	Phe	Phe	Thr	Cys	Val	Ile	Ser	Ile	Leu	Leu	Phe	Leu
			35				40					45			
Leu	Asn	Phe	Cys	Leu	Arg	Ala	Glu	Leu	Cys	Pro	Thr	Ala	Leu	Lys	Cys
	50				55					60					
Ser	Ala	Glu	Thr	Val	Met	Leu	Lys	Thr	Ser	Cys	Tyr	Pro	Ala	Pro	Lys
65					70				75					80	
His	Val	Val	Leu	Gly	Asn	Ser	Tyr	Trp	Phe						
			85					90							

<210> 397

<211> 483

<212> DNA

<213> Homo sapiens

<400> 397

gccgtcatta aagagatcac ccctctcctc caacctggtg atgtcctcgt cgacggtggt
60
aatgcttatt ttggtgatac ccgccgccgt gaggaggaaa tacgtccac cggcattcac
120
tatgttggtta ctggcatctc cgggtggggga gtcggggccc tgagggtccc atcaattatg
180
cctggcgggg ttaaggaate ttacgaaate atcggaccgg tcttagaaaa aatctccgcc
240
cacgtcgacg gtgaaccctg ctgcgcatgg atgggtactg acggcgccgg acattctcgtc
300

aagatgggtcc ataatggcat cgagtacgcc gatatgcagt tcattggcga ggccgccccttc
 360
 ctttttgcgn tgcccgccgg tttgaccaat gctgaggccg ccgatgcctt cgagtcgtgg
 420
 aaccatggcg acctcaattc ctacctcgtc gaaatcactt ctccgggtact gcgtgcccaag
 480
 gat
 483

<210> 398

<211> 161

<212> PRT

<213> Homo sapiens

<400> 398

Ala Val Ile Lys Glu Ile Thr Pro Leu Leu Gln Pro Gly Asp Val Leu
 1 5 10 15
 Val Asp Gly Gly Asn Ala Tyr Phe Gly Asp Thr Arg Arg Arg Glu Glu
 20 25 30
 Glu Ile Arg Pro Thr Gly Ile His Tyr Val Gly Thr Gly Ile Ser Gly
 35 40 45
 Gly Gly Val Gly Ala Leu Arg Val Pro Ser Ile Met Pro Gly Gly Val
 50 55 60
 Lys Glu Ser Tyr Glu Ile Ile Gly Pro Val Leu Glu Lys Ile Ser Ala
 65 70 75 80
 His Val Asp Gly Glu Pro Cys Cys Ala Trp Met Gly Thr Asp Gly Ala
 85 90 95
 Gly His Phe Val Lys Met Val His Asn Gly Ile Glu Tyr Ala Asp Met
 100 105 110
 Gln Phe Ile Gly Glu Ala Pro Phe Leu Phe Ala Xaa Pro Ala Gly Leu
 115 120 125
 Thr Asn Ala Glu Ala Ala Asp Ala Phe Glu Ser Trp Asn His Gly Asp
 130 135 140
 Leu Asn Ser Tyr Leu Val Glu Ile Thr Ser Arg Val Leu Arg Ala Lys
 145 150 155 160
 Asp

<210> 399

<211> 314

<212> DNA

<213> Homo sapiens

<400> 399

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 ggctcatcca cccatccact cattcaccca tctatccatc cactcatcca cccatccagt
 120
 cattcaactca ttgtgccatc cactcatgta cccatccact cattcgccca ttatccatc
 180
 cactcaacca tccactcatc caccatcca nctcatcatc cgtccagtca cccatctatc
 240
 caccatgta tccatccact catccaccca tccactcatc tgtccatcca ctatccacc
 300

catctactca ccca
314

<210> 400
<211> 104
<212> PRT
<213> Homo sapiens

<400> 400
Xaa Gly Met Lys Thr Thr Gln Pro Phe Leu Ser Ser Asn Leu Leu Gln
1 5 10 15
Ala Ser Val His Gly Ser Ser Thr His Pro Leu Ile His Pro Ser Ile
20 25 30
His Pro Leu Ile His Pro Ser Ser His Ser Leu Ile Cys Pro Ser Thr
35 40 45
His Val Pro Ile His Ser Phe Ala His Leu Ser Ile His Ser Thr Ile
50 55 60
His Ser Ser Thr His Pro Xaa His His Pro Ser Ser His Pro Ser Ile
65 70 75 80
His Pro Cys Ile His Pro Leu Ile His Pro Ser Thr His Leu Ser Ile
85 90 95
His Leu Ser Thr His Leu Leu Thr
100

<210> 401
<211> 2165
<212> DNA
<213> Homo sapiens

<400> 401
gagaaaatgg aactacctgt atataaatta ggtgagcaaa cagtgtatca ggtagtttta
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agaagcaaat atatacagtc aatttaacag tggttacttc tctggattgt ttaatggtgt
120
caaaatgaaa gatctattga agtttacta tacattgcatt tgattgaacc ttggagagtt
180
ttatgaaaa gaggggcatc ccttgccatc tggttgccag tcttctctgc cccttctctt
240
gaaatgacct cctctttttt gccagattg tttctgacc atccgaactc agatggggtc
300
ctctaagtgc ttcctggata ttcacaaatc ccttcacaa gcccacgtgc gaagtgaatg
360
atctggagggt gcctgggcat ctgtgttgga agggagtgaa gactcaccag ccagtcagtt
420
tgtgggctac agttgtccca caaaaatcag gcatgttcac ctccctctg gggccctaca
480
gctgggactg atcatagcct cagattagaa gaaatactga cttctaactc tataagccag
540
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600
tgagcctaca gttttgtact ggggtgcacg gatgacagct ggggaagtgg aaaggcagct
660
tgaggattta tagcagctaa agggtaaatg ctgttatgca aaaggtcccc atatgaactt
720

cctacaggtg tagccgcagc caagtgtctg tacagctgct gagaatttgt cggatgatga
780
aaaatttcctc ttgtcatcac aagcgagtg aaagccagg gctgcatgag tggagaaagc
840
acagtctggt ttttcaagta ctgcagagaa tgagaatacc cagccgggag cctggagttg
900
aggcccgagt tacacaggt cccggaatac agacctggga agatagggga ggagagggga
960
agcttgtggc cttttgatcc gcccccgaa tgcaccogt gcgctgcttt gctgccttca
1020
tctcctgctc agaggccttc tccttcccag agacctcctt ggatgggtct aaggagagaca
1080
ctgcccgggc ctttttcctt gcaatcaca ggtccaaatc ctccaggctg cgcttgatcg
1140
gcccgcggc cccaatgttc tacgggtcca ttttcgggtg caggattggg tggaccatgc
1200
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1260
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1320
gacagtctcg actctggctg cctaagacct ggaactggga gatgccttgc ctctcctggg
1380
gcccctggtt ggaatgagcc agggccagga ccttgccggt aggtttgtgc gggttcttgg
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1500
cttgagggtg cagggacgtg agataattta catggagctt ttcttggtgt ctgtgggaag
1560
gaaaagaact gttttccgat tccctgtaca tgtccctgga agggatattg gatgtctgtt
1620
cattatgaag atggtgctcg gtgtgtctgt agaggctatg gagatgagg gacgagtaga
1680
agtcagccag gaagctaggc atgtgggaat gggggagggc cctttctctc aagagtttat
1740
ccttgccctc ctgaatttct tgcttcagga cgtaggagtc agcaagggg ttaagtgat
1800
gcttgagaga gctgcagcgg tggggatctg atcgactcag tttctcatgc ttaaagatgt
1860
cattgtaggt ctttctctct tccgagggtt tgcttctgaa actctggagc tgctgaatca
1920
ctgatggccc gctgaccgcc atatggtcag tgctttggcc atggtgggtc tgggacaaac
1980
tggaacacaa gtcaccccta gcaatcagtt tctttttgct gatcaagggt ggtggggagc
2040
cataagggtg gctgctggag aggctggccc cactcacttg ggacaaaagc ttttcttgg
2100
ccagtgggga catcatgcct ggggttcccc tagagtagag caggggcggt taattaagtc
2160
catgg
2165

<210> 402

<211> 87

<212> PRT

<213> Homo sapiens

<400> 402

Glu Tyr Pro Ala Gly Ser Leu Glu Leu Arg Pro Glu Leu His Arg Leu
 1 5 10 15
 Pro Glu Tyr Arg Pro Gly Lys Ile Gly Glu Arg Gly Ser Leu Trp
 20 25 30
 Pro Phe Asp Pro Pro Pro Glu Cys Pro Pro Cys Ala Ala Leu Leu Pro
 35 40 45
 Ser Ser Pro Ala Gln Arg Pro Ser Pro Ser Gln Arg Pro Pro Trp Met
 50 55 60
 Gly Leu Arg Glu Thr Leu Pro Gly Pro Phe Ser Leu Gln Ser Gln Gly
 65 70 75 80
 Pro Asn Pro Pro Gly Cys Ala
 85

<210> 403

<211> 369

<212> DNA

<213> Homo sapiens

<400> 403

cccatgggtg tgtcccagga cggcgtcatg aagcgtcagg taaatgacaa ggaacgggtc
 60
 gcgcacttgt tcgaatacac gacgcaagtg tctgtcgact cgacgccgca actcgtccag
 120
 ccttcgcccc cgctgcacga caacctcgtg cctgtccaga tgatcttttg cttcaagcag
 180
 cgcaacgcga aaaagatcaa tagccaccgc tgggtatttc atgcactggg ccgcatgcta
 240
 cagcccgaca tggctgtctt ggtggacgtc ggcacgaagc ccggccacct cgccttatac
 300
 catctatggc aggcattcta tcaccgacct accttgggcg gtgcttgcgg cgaattcat
 360
 gctatgatc
 369

<210> 404

<211> 123

<212> PRT

<213> Homo sapiens

<400> 404

Pro Met Gly Val Ser Gln Asp Gly Val Met Lys Arg Gln Val Asn Asp
 1 5 10 15
 Lys Glu Thr Val Ala His Leu Phe Glu Tyr Thr Thr Gln Val Ser Val
 20 25 30
 Asp Ser Thr Pro Gln Leu Val Gln Pro Ser Pro Thr Ser His Asp Asn
 35 40 45
 Leu Val Pro Val Gln Met Ile Phe Cys Phe Lys Gln Arg Asn Ala Lys
 50 55 60
 Lys Ile Asn Ser His Arg Trp Val Phe His Ala Leu Gly Arg Met Leu
 65 70 75 80
 Gln Pro Asp Met Val Val Leu Val Asp Val Gly Thr Lys Pro Gly His

	85		90		95
Leu	Ala	Leu	Tyr	His	Leu
		Trp	Gln	Ala	Phe
			Tyr	His	Arg
				Pro	Thr
					Leu
	100		105		110
Gly	Gly	Ala	Cys	Gly	Glu
		Ile	His	Ala	Met
	115		120		

<210> 405

<211> 840

<212> DNA

<213> Homo sapiens

<400> 405

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gaattccgc gcaccagctc gaagctggag cactttgtgt ctatcctgct gaagtgtctc
60
gactcgccct ggaccacgag ggcctgtctg gagacagtgg tggaggagag cgaccccaag
120
cgggccttca gcaagatgaa tgggtccatg gacaaaaagt catcgacctg cagtgaggac
180
gtggaggcca ccgtgcccac gctgcagcgg accaagtcac ggatcgagca gggtatcgtg
240
gaccgctcag agacgggctg gctggacaag aaggaggggg agcaagccaa ggcgctgttt
300
gagaagggtga agaagttccg gacccatgtg gaggaggggg acatttgtga ccgcctctac
360
atgcgcgaga ccatcatcaa ggtgatcaag ttcacctca tcatctgcta caccgtctac
420
tacgtgcaca acatcaagtt cgacgtggac tgcaccgtgg acattgagag cctgacgggc
480
taccgcacct accgctgtgc ccacccctg gccacactct tcaagatcct ggcgtccttc
540
tacatcgacc tagtcatctt ctacggcctc atctgcctgt atacactgtg gtggatgcta
600
cggcgctccc tcaagaagta ctgctttgag tcgatccgtg aggagagcag ctacagcgac
660
atccccgacg tcaagaacga cttcgccctc atgctgcacc tcattgacca atacgaccgg
720
ctctactcca agcgcttcgc cgtcttctctg tcggagggtga gtgagaacaa gctgcggcag
780
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840

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<210> 406

<211> 91

<212> PRT

<213> Homo sapiens

<400> 406

Leu	Ile	Cys	Met	Tyr	Thr	Leu	Trp	Trp	Met	Leu	Arg	Arg	Ser	Leu	Lys
1					5				10					15	
Lys	Tyr	Ser	Phe	Glu	Ser	Ile	Arg	Glu	Ser	Ser	Tyr	Ser	Ser	Asp	Ile
			20					25					30		
Pro	Asp	Val	Lys	Asn	Asp	Phe	Ala	Phe	Met	Leu	His	Leu	Ile	Asp	Gln
			35				40					45			
Tyr	Asp	Pro	Leu	Tyr	Ser	Lys	Arg	Phe	Ala	Val	Phe	Leu	Ser	Glu	Val

```

      50              55              60
Ser  Glu  Asn  Lys  Leu  Arg  Gln  Leu  Asn  Leu  Asn  Asn  Glu  Trp  Thr  Leu
65              70              75              80
Asp  Lys  Leu  Arg  Tyr  Gly  Glu  Lys  Thr  Thr  Arg
      85              90

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<210> 407
 <211> 535
 <212> DNA
 <213> Homo sapiens

```

<400> 407
g c c t a t t g t a c c a g c t c t c c a g g g c t g g g g a c t t g c t a g a g c a g g g t t c c a g t g c c c c c
60
a g g c t c t a c t t g c t c t g c c t g g t c t c a g g t g t a g a g g g a t g g a g a g c t g a c t t c c a g c
120
c t g c t t c t t g c t g t c t a g g g g c c a g g g g c t c g g g a c a c a g a g c t c t c t g g a g g c c g a g c a
180
c a a g c c c t t g g c a g a g g t g a g g c a g a g c t c g a c t g t t c a t t c g a c t a c g t t g c c a a g g
240
a g a t g c t c g c t c g g a g t g g t t g c t c t g g c t c t g g g a t t c c a a c c a a g c t g c c t t c t c t g
300
a t g t g g c c c t a g t g c t c t g g c g g a t g t a c c t t g g c t c t g c c t g g a c c c t c t c t c t c t c
360
c a g g c c t c t g t c c c a c c a g g a t g a t g c c t a t c c a g a g c t a t t g t c t c t c c c a c t t c c t
420
c c c c g a g c t t c c c a t t c c g t g t c t c t c t g g a g g c c c a t c a t c c t g g t g g a g g t g t t
480
g c a c t g a g g a c c a c a g c a g c c t c g c a t t c c a c g g g c a a a g g g g t a t g t g t a g g
535

```

<210> 408
 <211> 97
 <212> PRT
 <213> Homo sapiens

```

<400> 408
Met  Leu  Ala  Arg  Ser  Gly  Cys  Ser  Gly  Ser  Gly  Ile  Pro  Asn  Gln  Ala
1              5              10              15
Ala  Phe  Ser  Asp  Val  Ala  Leu  Val  Leu  Trp  Ala  Asp  Val  Pro  Trp  Leu
      20              25              30
Cys  Leu  Asp  Pro  Leu  Ser  Leu  Pro  Gly  Leu  Cys  Pro  Thr  Arg  Met  Met
      35              40              45
Pro  Ile  Gln  Ser  Ser  Leu  Ser  Ser  Pro  Thr  Ser  Ser  Pro  Ser  Phe  Pro
      50              55              60
Phe  Arg  Val  Ser  Leu  Glu  Gly  Pro  Ser  Ser  Ser  Trp  Trp  Arg  Cys  Cys
65              70              75              80
Thr  Glu  Asp  His  Ser  Ser  Pro  Arg  Ile  Pro  Thr  Gly  Lys  Gly  Val  Cys
      85              90              95
Val

```

<210> 409
 <211> 375

<212> DNA

<213> Homo sapiens

<400> 409

ngtgtcatgg gtgtctatac cagcgatgag gccaaagactg ccaagacttt tggatttggg
 60
 ggacttcgca ttacgactaa tatttctctt gccacaact tcaatatgga tgaattttct
 120
 gatattgtct tccgtgtcaa tgataccagt ttgacaccaa ctgtgggacc agaattagct
 180
 agaaaaattga ccgaaattgc tggctcttcag caaggggagt atcaggtgtc agatgcgact
 240
 gcagccttcc aagaagtgc acaattgttc ggctttataa ctacgattat tagtgccatt
 300
 gcaggaattt ccttttttgt tggagggact ggtgttatga acatcatgct ggttcgggtg
 360
 acggagcgtg cgcg
 375

<210> 410

<211> 125

<212> PRT

<213> Homo sapiens

<400> 410

Xaa	Val	Met	Gly	Val	Tyr	Thr	Ser	Asp	Glu	Ala	Lys	Thr	Ala	Lys	Thr
1				5					10				15		
Phe	Gly	Ile	Gly	Gly	Leu	Pro	Ile	Thr	Thr	Asn	Ile	Ser	Leu	Ala	Asn
			20				25						30		
Asn	Phe	Asn	Met	Asp	Glu	Ile	Ser	Asp	Ile	Val	Phe	Arg	Val	Asn	Asp
		35					40				45				
Thr	Ser	Leu	Thr	Pro	Thr	Val	Gly	Pro	Glu	Leu	Ala	Arg	Lys	Leu	Thr
	50				55				60						
Glu	Ile	Ala	Gly	Leu	Gln	Gln	Gly	Glu	Tyr	Gln	Val	Ser	Asp	Ala	Thr
65				70					75					80	
Ala	Ala	Phe	Gln	Glu	Val	Gln	Gln	Leu	Phe	Gly	Phe	Ile	Thr	Thr	Ile
			85					90					95		
Ile	Ser	Ala	Ile	Ala	Gly	Ile	Ser	Leu	Phe	Val	Gly	Gly	Thr	Gly	Val
		100					105						110		
Met	Asn	Ile	Met	Leu	Val	Ser	Val	Thr	Glu	Arg	Thr	Arg			
	115						120					125			

<210> 411

<211> 409

<212> DNA

<213> Homo sapiens

<400> 411

ccacatactt caccctcttc accccctcca cctactccac cacctggcag tcgccatcga
 60
 gggatgggacg caactccacg tccacatgct cgggaccacg cggcggtgtg tggatgtgca
 120
 gcacgcggtc ggggcccctt gagctcgaag gcgcggcgca tcgggcagtg ctgcgcggcc
 180

tggtcgcagg gcacgtcgta ctggtgcgag acgcggaagc acttgtggcc gatgtaggcg
 240
 cgatcggtcg tccccgaactg gcgctgatag gccgtgtaca caacacaaac tggtgtactc
 300
 ccggtccacc acgatcatgg gctgggactc gtgttccagg tggggggcca gggcttgggc
 360
 ctgcggtgag cgcgtggggg ggatggggca tagcgtcggg gaggagggtg
 409

<210> 412

<211> 119

<212> PRT

<213> Homo sapiens

<400> 412

Met	Pro	His	Pro	Pro	His	Ala	Leu	Thr	Ala	Gly	Pro	Ser	Pro	Gly	Pro
1				5					10					15	
Pro	Pro	Gly	Thr	Arg	Val	Pro	Ala	His	Asp	Arg	Gly	Gly	Pro	Gly	Val
			20					25					30		
Gln	Gln	Phe	Val	Leu	Cys	Thr	Arg	Pro	Ile	Ser	Ala	Ser	Ser	Gly	Gln
		35					40					45			
Pro	Ile	Ala	Pro	Thr	Ser	Ala	Thr	Ser	Ala	Ser	Ala	Ser	Arg	Thr	Ser
	50				55				60						
Thr	Thr	Cys	Pro	Ala	Thr	Arg	Pro	Ala	Ser	Thr	Ala	Arg	Cys	Ala	Ala
65				70					75					80	
Pro	Ser	Ser	Ser	Arg	Gly	Pro	Asp	Arg	Val	Leu	His	Ile	His	His	Thr
			85					90					95		
Pro	Arg	Gly	Pro	Glu	His	Val	Asp	Val	Glu	Leu	Arg	Pro	Ile	Leu	Asp
			100				105						110		
Gly	Asp	Cys	Gln	Val	Val	Glu									
			115												

<210> 413

<211> 357

<212> DNA

<213> Homo sapiens

<400> 413

ccgggcatcc caccaccggg tgtcatgaac caagtagtgg cccctatggt agggactcca
 60
 gcaccgggtg gaagtccata tggacaacag gtgggagttt tggggcctcc agggcagcag
 120
 gcaccacctc catatcccg cccacatcca gctggacccc ctgtcataca gcagccaaca
 180
 acacccatgt ttgtagctcc cccccaaag acccagcggc ttcttcactc agaggcctac
 240
 ctgaaatata ttgaaggact cagtgcggag tccaacagca ttagcaagtg ggatcagaca
 300
 ctggcagctc ggagacgga cgtccatttg tcgaaagaac aggagagccg cctaccc
 357

<210> 414

<211> 119

<212> PRT

<213> Homo sapiens

<400> 414

```

Pro Gly Ile Pro Pro Pro Gly Val Met Asn Gln Val Val Ala Pro Met
 1           5           10           15
Val Gly Thr Pro Ala Pro Gly Gly Ser Pro Tyr Gly Gln Gln Val Gly
      20           25           30
Val Leu Gly Pro Pro Gly Gln Gln Ala Pro Pro Pro Tyr Pro Gly Pro
      35           40           45
His Pro Ala Gly Pro Pro Val Ile Gln Gln Pro Thr Thr Pro Met Phe
      50           55           60
Val Ala Pro Pro Pro Lys Thr Gln Arg Leu Leu His Ser Glu Ala Tyr
      65           70           75           80
Leu Lys Tyr Ile Glu Gly Leu Ser Ala Glu Ser Asn Ser Ile Ser Lys
      85           90           95
Trp Asp Gln Thr Leu Ala Ala Arg Arg Arg Asp Val His Leu Ser Lys
      100          105          110
Glu Gln Glu Ser Arg Leu Pro
      115

```

<210> 415

<211> 332

<212> DNA

<213> Homo sapiens

<400> 415

```

tctagagcca acttggttat cgtaatgaat agagagacta catctatatc aattattacg
60
ctctatatga atcatgaagc ttgggttata tgtatgacaa aaattgcaga aaaatcgaaa
120
caagaatatg gcgacttact aaaagaaaaa gaccatttac aagatatgga acagcttgag
180
atgactatcg tctcgatcca tacgcggtat ccgctccattg tcagaattca agggaaaaatc
240
aacacattac agccagagct ttggcaagct cccaatttag caattcggtt aattgtgagc
300
aatccgccag agggacaacc catctcacgc gt
332

```

<210> 416

<211> 102

<212> PRT

<213> Homo sapiens

<400> 416

```

Met Asn Arg Glu Thr Thr Ser Ile Ser Ile Ile Thr Leu Tyr Ser Asn
 1           5           10           15
His Glu Ala Trp Val Ile Cys Met Thr Lys Ile Ala Glu Lys Ser Lys
      20           25           30
Gln Glu Tyr Gly Asp Leu Leu Lys Glu Lys Asp His Leu Gln Asp Met
      35           40           45
Glu Gln Leu Glu Met Thr Ile Val Ser Ile His Thr Pro Tyr Pro Ser
      50           55           60
Ile Val Arg Ile Gln Gly Lys Ile Asn Thr Leu Gln Pro Glu Leu Trp

```

```

65          70          75          80
Gln Ala Pro Asn Leu Ala Ile Arg Leu Ile Val Ser Asn Pro Pro Glu
          85          90          95
Gly Gln Pro Ile Ser Arg
          100

```

```

<210> 417
<211> 483
<212> DNA
<213> Homo sapiens

```

```

<400> 417
gaattcctcg ccgtctctga ggtgggcgag gacaccttgg tgcgctccac cgagggagac
60
tacgcggcca acgtcgaggc cgtgggtgacc ccagcaccgg cggagaaaga tattgagggc
120
cagccagaag cacaggaaca tgacaccccg ggtacagaga ccattgagaa gctggctcgaa
180
tgggcccagg gcgcaggcat tactgtaaac ccccgcggtg ttgtttatta taccctcaag
240
tgcatgatga tcaagctcca ccacccggcc gcggagagcg aagagcgcgga gtccgagttg
300
gcggcgggtt tcattccctgg cgatcgagag ctggatgaaa agcgccttga ggccgcactc
360
gagccggtgg agttttagtt ggcaggggat aaggactttg cagacaatat cttcctagtc
420
aagggtctat ttggcccgcg cgctttgaac gccaatggca tcaaggtctt ggccgatcca
480
cgc
483

```

```

<210> 418
<211> 161
<212> PRT
<213> Homo sapiens

```

```

<400> 418
Glu Phe Leu Ala Val Ser Glu Val Gly Glu Asp Thr Phe Val Arg Ser
1          5          10          15
Thr Glu Gly Asp Tyr Ala Ala Asn Val Glu Ala Val Val Thr Pro Ala
20          25          30
Pro Ala Glu Lys Asp Ile Glu Gly Gln Pro Glu Ala Gln Glu His Asp
35          40          45
Thr Pro Gly Thr Glu Thr Ile Glu Lys Leu Val Glu Trp Ala Gln Gly
50          55          60
Ala Gly Ile Thr Val Asn Pro Arg Val Val Cys Tyr Tyr Thr Leu Lys
65          70          75          80
Cys Met Met Ile Lys Leu His His Pro Ala Ala Glu Ser Glu Glu Arg
85          90          95
Glu Ser Glu Leu Ala Ala Val Leu Ile Pro Gly Asp Arg Glu Leu Asp
100          105          110
Glu Lys Arg Leu Glu Ala Ala Leu Glu Pro Val Glu Phe Glu Leu Ala
115          120          125
Gly Asp Lys Asp Phe Ala Asp Asn Asp Phe Leu Val Lys Gly Tyr Val

```

130	135	140
Gly Pro Arg Ala Leu	Asn Ala Asn Gly Ile Lys	Val Leu Ala Asp Pro
145	150	155
Arg		160

<210> 419
 <211> 797
 <212> DNA
 <213> Homo sapiens

<400> 419
 atttcacccc agggaaaacca gtaaggacca atgattaagc ccaaggttgg gtaccgagtt
 60
 cggatccata agtaccggcc gccccagggtg ctggaatttg gggtcccccc ggtgaaaaa
 120
 tccatgcagc cgcgttgtct taggtagaaa agggagactg ggggtgggtg ggctgagctc
 180
 aagcccctgc ctacatactt tagtagtaac gactcccgat ctgcatccaa cacatttacc
 240
 gaacttctag taagcgcccc cgcctgcaag cgaaagcact cccctgccaa gaaacagatc
 300
 ttttccactt aaaattccca aactcagacc ttccactttt tactgaacaa aaagcgtgta
 360
 catgatctga agggttgaca tgacattttc taaattgggc gaatcaggaa gaggttgatg
 420
 aaaatccttg acgtttttctg gggataggac atttgtgtgt gataacgttc ttaagtcgaa
 480
 ttccagtgtg gcagtgcacg cagattcttc attggtgtta gtgtatttcc ataccggtatg
 540
 tattagtaca agaaatagtg ttcccttttga cactcgaacc caaggagtgg tccgaggctt
 600
 tttagaggca cgtaggatca atgtctctga agcagatttg gtgaaggatg caggctctcat
 660
 aatttacaga gcaatcacag ccttcttttga aacggagaaa ttagattcta tgaatttttg
 720
 tcagtgcaga tagatatgat gtggagaaac ggggaaaatt gagtacaaaa agatgaggct
 780
 tgaatgatgg ctggcca
 797

<210> 420
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 420
 Met Arg Pro Ala Ser Phe Thr Lys Ser Ala Ser Glu Thr Leu Ile Leu
 1 5 10 15
 Arg Cys Leu Lys Lys Pro Arg Thr Thr Pro Trp Val Arg Val Ser Lys
 20 25 30
 Gly Thr Leu Phe Leu Val Leu Ile His Thr Val Trp Lys Tyr Thr Asn
 35 40 45
 Thr Asn Glu Glu Ser Ala Cys Thr Ala Thr Leu Lys Phe Asp Leu Arg

```

      50              55              60
Thr Leu Ser His Thr Asn Val Leu Ser Pro Glu Asn Val Lys Asp Phe
65              70              75              80
His Gln Pro Leu Pro Asp Ser Pro Asn Leu Glu Asn Val Met Ser Thr
      85              90              95
Leu Gln Ile Met Tyr Thr Leu Phe Val Gln
      100              105

```

```

<210> 421
<211> 406
<212> DNA
<213> Homo sapiens

```

```

<400> 421
ggatccacca tgatggagcc caccacacca tcctcagtc acctgctgca gcttctccat
60
aaccacaac aggtcaatct tgtctcccta aacacacccat gtgtctctcat gctgccatgg
120
tttgcctggg gccctctcta cctcctctgc tttctggaga acccttgca ctcctccaag
180
ccttcaagtt ggaaagtga cagtcagcat atgtctctag ctcagccctt actgcgtgga
240
ttcatgaaga ttggttcaact gtcagccctt gaccagaacg tgtgttttag gaaagcagga
300
accaagtctt accaatgtct gtagtccag cctccacctt ggcatacagt aggtgctcat
360
tgaatgtggg agggaaagag gagacacatg gaagggaatg tcattc
406

```

```

<210> 422
<211> 104
<212> PRT
<213> Homo sapiens

```

```

<400> 422
Met Met Glu Pro Thr His Pro Ser Ser Val His Leu Leu Gln Leu Leu
1      5      10      15
His Asn Pro Thr Gln Val Asn Leu Val Ser Leu Asn Thr Pro Cys Ala
      20      25      30
Leu Met Leu Pro Trp Phe Ala Trp Gly Pro Leu Tyr Leu Leu Cys Phe
      35      40      45
Leu Glu Asn Pro Cys Thr Pro Pro Lys Pro Ser Ser Trp Lys Val Asn
      50      55      60
Ser Gln His Met Ser Leu Ala Gln Pro Leu Leu Arg Gly Phe Met Lys
65      70      75      80
Ile Gly Ser Leu Ser Ala Pro Asp Gln Asn Val Cys Phe Arg Lys Ala
      85      90      95
Gly Thr Lys Ser Tyr Gln Cys Leu
      100

```

```

<210> 423
<211> 628
<212> DNA
<213> Homo sapiens

```


<400> 423
 ngccacccta cgctcgcct gcaatggcaa cttcagatcc cgggtggcac cgtagtctta
 60
 gagccaccgg ttctgagcgg ggaggacgac ggggttgggg cggaggaagg agaggagaaa
 120
 ggagatgggg atttgcgtgac gcagacccaa gcccaaacgc cgactccagc acccgcttgg
 180
 ccgggcgccc cagccacacc gcgttctctg gccctcgcaa atggctccct gttggtgccc
 240
 ctctctgagt ccaaggaggc gggcgtctac acttgccgtg cacacaatga gctgggcgcc
 300
 aactctacgt caatacgcgt ggcggtggca gcaaccgggc ccccaaaaca cgcgcctggc
 360
 gccgggggag aaccgacgg acaggcccg acctctgagc gcaagtccac agccaagggc
 420
 cggggcaaca gcgtctctgcc ttccaaaccc gagggcaaaa tcaaggcca aggcctggcc
 480
 aaggtcagca ttctcgggga gaccgagacg gagccggagg aggacacaag tgaggagag
 540
 gagggccaag accagatcct cgcggaccgc gcggaggagc agcgtgtgag caacggggac
 600
 ccctctcggt acgtttctaa ccacgcgt
 628

<210> 424

<211> 209

<212> PRT

<213> Homo sapiens

<400> 424

Xaa	His	Pro	Thr	Pro	Arg	Leu	Gln	Trp	Gln	Leu	Gln	Ile	Pro	Gly	Gly
1				5				10						15	
Thr	Val	Val	Leu	Glu	Pro	Pro	Val	Leu	Ser	Gly	Glu	Asp	Asp	Gly	Val
			20					25					30		
Gly	Ala	Glu	Glu	Gly	Glu	Gly	Glu	Gly	Asp	Gly	Asp	Leu	Leu	Thr	Gln
		35					40					45			
Thr	Gln	Ala	Gln	Thr	Pro	Thr	Pro	Ala	Pro	Ala	Trp	Pro	Ala	Pro	Pro
		50				55					60				
Ala	Thr	Pro	Arg	Phe	Leu	Ala	Leu	Ala	Asn	Gly	Ser	Leu	Leu	Val	Pro
		65			70					75				80	
Leu	Leu	Ser	Ala	Lys	Glu	Ala	Gly	Val	Tyr	Thr	Cys	Arg	Ala	His	Asn
			85						90					95	
Glu	Leu	Gly	Ala	Asn	Ser	Thr	Ser	Ile	Arg	Val	Ala	Val	Ala	Ala	Thr
			100					105					110		
Gly	Pro	Pro	Lys	His	Ala	Pro	Gly	Ala	Gly	Gly	Glu	Pro	Asp	Gly	Gln
		115					120					125			
Ala	Pro	Thr	Ser	Glu	Arg	Lys	Ser	Thr	Ala	Lys	Gly	Arg	Gly	Asn	Ser
		130				135					140				
Val	Leu	Pro	Ser	Lys	Pro	Glu	Gly	Lys	Ile	Lys	Gly	Gln	Gly	Leu	Ala
			145		150					155				160	
Lys	Val	Ser	Ile	Leu	Gly	Glu	Thr	Glu	Thr	Glu	Pro	Glu	Glu	Asp	Thr
			165					170						175	
Ser	Glu	Gly	Glu	Glu	Ala	Glu	Asp	Gln	Ile	Leu	Ala	Asp	Pro	Ala	Glu

145

150

155

<210> 427

<211> 546

<212> DNA

<213> Homo sapiens

<400> 427

ctagcggtag tagaaggat gcagtttgat cgcggctact tgtctcogta tttcatcaac
 60
 aatcaagaaa caatgaatgc agagctagaa aacccattta ttcttcttgt tgataagaaa
 120
 atttctaata tccgtgactt gctaccaatt ttggaagggtg ttgctaaagc atcgcgcccc
 180
 ttgttgatca ttgcggaaga cgttgaaggc gaagcggttg caaccttggt tgtaaacact
 240
 atgcgcggca tcgtaaaagt agcggcagcg aaagcgccag gttttggtga tcgccgtaaa
 300
 gcaatgcttc aagacattgc tgtgctaacg ggttcaactg ttatttcaga agaaattggc
 360
 attaagcttg aagaagcgac aattgaacag ttgggtacag cgaagcgcggt tacattgaca
 420
 aaagaaagta caacgattgt tgatggtgag ggtgtgtgac ctaatattac tggtcgtggt
 480
 gagcaaattc gtgcagaaat tgctaactct tcttctgggt acgataaaga gaaattgcaa
 540
 gaacgc
 546

<210> 428

<211> 182

<212> PRT

<213> Homo sapiens

<400> 428

Leu	Ala	Val	Val	Gly	Met	Gln	Phe	Asp	Arg	Gly	Tyr	Leu	Ser	Pro	
1			5					10					15		
Tyr	Phe	Ile	Asn	Asn	Gln	Glu	Thr	Met	Asn	Ala	Glu	Leu	Glu	Asn	Pro
			20					25					30		
Phe	Ile	Leu	Leu	Val	Asp	Lys	Lys	Ile	Ser	Asn	Ile	Arg	Asp	Leu	Leu
			35				40					45			
Pro	Ile	Leu	Glu	Gly	Val	Ala	Lys	Ala	Ser	Arg	Pro	Leu	Leu	Ile	Ile
			50				55				60				
Ala	Glu	Asp	Val	Glu	Gly	Glu	Ala	Leu	Ala	Thr	Leu	Val	Val	Asn	Thr
65				70					75					80	
Met	Arg	Gly	Ile	Val	Lys	Val	Ala	Ala	Ala	Lys	Ala	Pro	Gly	Phe	Gly
				85					90					95	
Asp	Arg	Arg	Lys	Ala	Met	Leu	Gln	Asp	Ile	Ala	Val	Leu	Thr	Gly	Ser
			100					105					110		
Thr	Val	Ile	Ser	Glu	Glu	Ile	Gly	Ile	Lys	Leu	Glu	Glu	Ala	Thr	Ile
			115				120					125			
Glu	Gln	Leu	Gly	Thr	Ala	Lys	Arg	Val	Thr	Leu	Thr	Lys	Glu	Ser	Thr
			130				135					140			
Thr	Ile	Val	Asp	Gly	Ala	Gly	Val	Ala	Ala	Asn	Ile	Thr	Gly	Arg	Val

```

145             150             155             160
Glu Gln Ile Arg Ala Glu Ile Ala Asn Ser Ser Ser Gly Tyr Asp Lys
             165             170             175
Glu Lys Leu Gln Glu Arg
             180

```

```

<210> 429
<211> 425
<212> DNA
<213> Homo sapiens

```

```

<400> 429
gctagcagcc cttacaggag acgggctaataataatgcag cagtggctcc gacaacttgc
60
ccgttgacgc cgggtcacgga tccatttgct tttagtagac aggcgcgtcca aagtacacca
120
ctgggcaggtt cgtccaaaag cagtccacct gtcttgcaag gccagagcccc cgcaggggtt
180
tttcaacacc ccggtttgct tgtgccttac acacaatgca aaaaatagct ctccaggagcc
240
ctgtgagccc ctgcctggac ctctgacaca gccagagca catgccagtc cgttttctgg
300
tgcataggaca cttcagcac ctctggggcc tgagatgaac aggagtgcag aggtcgggtcc
360
cagttcagag cctgaagttc agactctgcc atatcttct cactacattc caggagtgga
420
tcctg
425

```

```

<210> 430
<211> 130
<212> PRT
<213> Homo sapiens

```

```

<400> 430
Met Gln Gln Trp Leu Arg Gln Leu Ala Arg Cys Ser Arg Ser Arg Ile
1             5             10             15
His Leu Leu Leu Val Asp Arg Arg Ser Lys Val His His Trp Ala Val
20             25             30
Arg Pro Lys Ala Val His Leu Ser Cys Lys Ala Gln Pro Pro Gln Gly
35             40             45
Phe Leu Asn Thr Pro Val Cys Leu Cys Leu Thr His Asn Ala Lys Asn
50             55             60
Ser Ser Gln Gly Pro Cys Glu Pro Leu Pro Gly Pro Leu Thr Gln Pro
65             70             75             80
Arg Ala His Ala Ser Pro Phe Ser Gly Ala Leu Thr Pro Ser Ala Pro
85             90             95
Pro Gly Pro Glu Met Asn Arg Ser Ala Glu Val Gly Pro Ser Ser Glu
100            105            110
Pro Glu Val Gln Thr Leu Pro Tyr Leu Pro His Tyr Ile Pro Gly Val
115            120            125
Asp Pro
130

```

<210> 431
 <211> 192
 <212> DNA
 <213> Homo sapiens

<400> 431
 ctagccatcc accagcgtag acacacggga gagaggccct acactggcct cgggtgcaac
 60
 cgccgcttcc gccagcgcac ggccctcgtc atccaccagc gcattccacac gggcgagaag
 120
 cctnaccgct gcccggaactg cgagcggcgc ttctcctcct cctctcgctt ggtagtcac
 180
 cggcgtgtgc ac
 192

<210> 432
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 432
 Leu Ala Ile His Gln Arg Thr His Thr Gly Glu Arg Pro Tyr Thr Gly
 1 5 10 15
 Leu Gly Cys Asn Arg Arg Phe Arg Gln Arg Thr Ala Leu Val Ile His
 20 25 30
 Gln Arg Ile His Thr Gly Glu Lys Pro Xaa Pro Cys Pro Asp Cys Glu
 35 40 45
 Arg Arg Phe Ser Ser Ser Ser Arg Leu Val Ser His Arg Arg Val His
 50 55 60

<210> 433
 <211> 635
 <212> DNA
 <213> Homo sapiens

<400> 433
 nngccggcgg ctgcgttggg atacgacgtc gctgcgattg ggcgtgagta tcttttgtag
 60
 ctcatggagg agcgtggcgc gtagtcggag gccgccgcgc tcatgccgct gctgtccgg
 120
 accgaccgag gcgcgtggga cactgttctg tgctgctacc tcgagcggca ccaaggga
 180
 gcgatactcc cgcacattcc gacgcaggac cccagctga gtgagatggt gtacgatctc
 240
 gtgctgtgtc atctgctgca gcacgatccc acgcagctgt tggcgacgct ccgcgcatgg
 300
 ccgagtcaca tctactcgaa gcaggcgggt gctgcggcga tcggcgatca cgcacgaacc
 360
 agccgcacgc tgctcagatg cctcgcacag ctgtacatgg ccgcacatca gcccgcaag
 420
 gctctgacat actacatgcg cctgcgtgat ccatgcgtgt ttgatctcat tcgcgagtag
 480
 gatctgctga tcgatgtgca gcaccacatc ggcacgctcg tcgagctcga tcaggaatgc
 540

gccggctcca ctgagccgcg ctccagcgcg cttatgccgc tgctcgtgcc atataccac
 600
 tcgattccca tccagcgcgc catggcgag ctcga
 635

<210> 434
 <211> 211
 <212> PRT
 <213> Homo sapiens

<400> 434
 Xaa Pro Ala Ala Ala Leu Gly Tyr Asp Val Ala Ala Ile Gly Arg Glu
 1 5 10 15
 Tyr Leu Trp Tyr Leu Met Glu Glu Arg Gly Ala Tyr Ala Glu Ala Ala
 20 25 30
 Ala Leu Met Pro Leu Leu Arg Thr Asp Arg Gly Ala Trp Asp Thr
 35 40 45
 Phe Val Cys Cys Tyr Leu Glu Arg His Gln Arg Asp Ala Ile Leu Pro
 50 55 60
 His Ile Pro Thr Gln Asp Pro Gln Leu Ser Glu Met Val Tyr Asp Leu
 65 70 75 80
 Val Leu Val His Leu Leu Gln His Asp Pro Thr Gln Leu Leu Ala Thr
 85 90 95
 Leu Arg Ala Trp Pro Ser His Ile Tyr Ser Lys Gln Ala Val Ala Ala
 100 105 110
 Ala Ile Gly Asp His Ala Arg Thr Ser Arg Thr Leu Leu Glu Cys Leu
 115 120 125
 Ala Gln Leu Tyr Met Ala Ala His Gln Pro Gly Lys Ala Leu Thr Tyr
 130 135 140
 Tyr Met Arg Leu Arg Asp Pro Cys Val Phe Asp Leu Ile Arg Glu Tyr
 145 150 155 160
 Asp Leu Leu Ile Asp Val Gln His His Ile Gly Thr Leu Val Glu Leu
 165 170 175
 Asp Gln Glu Cys Ala Gly Ser Thr Glu Pro Arg Ser Ser Ala Leu Met
 180 185 190
 Pro Leu Leu Val Pro Tyr Thr His Ser Ile Pro Ile Gln Arg Ala Met
 195 200 205
 Ala Gln Leu
 210

<210> 435
 <211> 493
 <212> DNA
 <213> Homo sapiens

<400> 435
 nncgtacgtt cgcgtatttt ccgcgccccg gaagctatcg ataataaagt tcaaccgctg
 60
 atccagcgtt agcaatggcg ggcacaggaa gggacttagt gcatgcagaa agaaaagctt
 120
 tccgctctga tggatggtga atcgttcgac agcgagctgt tgagttctct gtcgaagat
 180
 cgaacgcttc aacaaagctg gcagggtat cacctgatac gtgacacact gcgaggtgat
 240

gtcgggcaag tgatgcattc cgacatcgcc gatcgcgtag ccgctgcact tgagaaagaa
 300
 ccgccccgcg tgggtccctc cgccgttcag gaattctcagc cgcagcctca cacctggcag
 360
 aaaaatgccgt tctgggacaa agtgcgtccc tgggcgagcc agattacgca aatcggtatg
 420
 gcggcctcgc tgcgctggc ggtgatcgtc ggctgcagc agtacaacca gccttctcgc
 480
 ccatcgaacg cgt
 493

<210> 436
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 436
 Met Gln Lys Glu Lys Leu Ser Ala Leu Met Asp Gly Glu Ser Phe Asp
 1 5 10 15
 Ser Glu Leu Leu Ser Ser Leu Ser Gln Asp Arg Thr Leu Gln Gln Ser
 20 25 30
 Trp Gln Gly Tyr His Leu Ile Arg Asp Thr Leu Arg Gly Asp Val Gly
 35 40 45
 Gln Val Met His Leu Asp Ile Ala Asp Arg Val Ala Ala Ala Leu Glu
 50 55 60
 Lys Glu Pro Ala Arg Leu Val Pro Ser Ala Val Gln Glu Ser Gln Pro
 65 70 75 80
 Gln Pro His Thr Trp Gln Lys Met Pro Phe Trp Asp Lys Val Arg Pro
 85 90 95
 Trp Ala Ser Gln Ile Thr Gln Ile Gly Met Ala Ala Cys Val Ser Leu
 100 105 110
 Ala Val Ile Val Gly Val Gln Gln Tyr Asn Gln Pro Ser Ala Pro Ser
 115 120 125
 Asn Ala
 130

<210> 437
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 437
 ntggtaaccg gtgtccctga tatggaccct gctgtgttag agcgtaaatt atttatttta
 60
 cgtaattatg taacacgcat ctgtttggag tctgttaatg gaattaagga caacttttat
 120
 attaatacat tctcatacaa aacaatcggt tataaaggtc agttaaccac tgaacaagtg
 180
 ccacaatatt tcttagatgt acaaaatcca agtatggtaa cggcattatg gcttgttcac
 240
 tcacgtttct caacaaatc atttcctcgt tggcggttag cacaaccatt ccgttatcatc
 300
 gctcataatg gcgaaatcaa tacgggttcgc ggtaatatca attggatgaa agcacgtgaa
 360

gcgttacttg aagctgaatt ttctactcgc tcagaattag atatgttaat gccaatctgt
 420
 acggatggta tgtctgactc ggcaagg
 447

<210> 438
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 438
 Xaa Val Thr Gly Val Pro Asp Met Asp Pro Ala Val Leu Glu Arg Lys
 1 5 10 15
 Leu Phe Ile Leu Arg Asn Tyr Val Thr Arg Ile Cys Leu Glu Ser Val
 20 25 30
 Asn Gly Ile Lys Asp Asn Phe Tyr Ile Asn Thr Phe Ser Tyr Lys Thr
 35 40 45
 Ile Val Tyr Lys Gly Gln Leu Thr Thr Glu Gln Val Pro Gln Tyr Phe
 50 55 60
 Leu Asp Leu Gln Asn Pro Ser Met Val Thr Ala Leu Ala Leu Val His
 65 70 75 80
 Ser Arg Phe Ser Thr Asn Thr Phe Pro Arg Trp Arg Leu Ala Gln Pro
 85 90 95
 Phe Arg Tyr Ile Ala His Asn Gly Glu Ile Asn Thr Val Arg Gly Asn
 100 105 110
 Ile Asn Trp Met Lys Ala Arg Glu Ala Leu Leu Glu Ala Glu Phe Phe
 115 120 125
 Thr Arg Ser Glu Leu Asp Met Leu Met Pro Ile Cys Thr Asp Gly Met
 130 135 140
 Ser Asp Ser Ala Arg
 145

<210> 439
 <211> 395
 <212> DNA
 <213> Homo sapiens

<400> 439
 nacgcgtgaa gggagagtgg ggccgagccc caggaggctg tcctgcagca gctgcaccag
 60
 ettcgccagg gccggctgga cctggccacg caaagcctga cggtggagac ctgcagggcc
 120
 ctgggcaagc tgctgccgag ggagacgctg tgcacggagc tggctctgag tgactgcatg
 180
 ctacgcgagg aagggggccac actgctgctc cgaggcctgt gtgccaacac cgtgctgcgc
 240
 tttctggact taaagggcaa caaccttcgg gctgcagggg ccgaggctct gggaaaactc
 300
 ctccaacaga acaagtcctt tcagagcctc acgctggagt ggaacagcct gggcacgtgg
 360
 gacgatgcct tcgccacctt ctgcgggggc ctggc
 395

<210> 440

<211> 128

<212> PRT

<213> Homo sapiens

<400> 440

```

Arg Glu Ser Gly Ala Glu Pro Gln Glu Ala Val Leu Gln Gln Leu His
 1             5             10             15
Gln Leu Pro Arg Gly Arg Leu Asp Leu Ala Thr Gln Ser Leu Thr Val
          20             25             30
Glu Thr Cys Arg Ala Leu Gly Lys Leu Leu Pro Arg Glu Thr Leu Cys
          35             40             45
Thr Glu Leu Val Leu Ser Asp Cys Met Leu Ser Glu Glu Gly Ala Thr
          50             55             60
Leu Leu Leu Arg Gly Leu Cys Ala Asn Thr Val Leu Arg Phe Leu Asp
65             70             75             80
Leu Lys Gly Asn Asn Leu Arg Ala Ala Gly Ala Glu Ala Leu Gly Lys
          85             90             95
Leu Leu Gln Gln Asn Lys Ser Ile Gln Ser Leu Thr Leu Glu Trp Asn
          100            105            110
Ser Leu Gly Thr Trp Asp Asp Ala Phe Ala Thr Phe Cys Gly Gly Leu
          115            120            125

```

<210> 441

<211> 364

<212> DNA

<213> Homo sapiens

<400> 441

```

gccagctact acgtgaacat gttcgatgcc gagcagggtc tcttcgacag gcgcagcccg
60
ggcggcgagtg tccaagccgg cttggatccg gaatcctggg gcggtctgtt cactgagacc
120
gacgggttga acttcgcctt ccacgctcca caggacgggc gggggctggc cgcgctctac
180
ggcgggtccga aaggcttga gaacaagctc gatgcctttt tcgcgacgcc ggaacacgcg
240
gacaagccgg cgtacggcgg aatccacgaa atggtcaggc ccagagcggc ccggatgggc
300
caattgggca tgtccaacga gccctcgac catattccct acatctacaa ctatgcgggc
360
gcgc
364

```

<210> 442

<211> 121

<212> PRT

<213> Homo sapiens

<400> 442

```

Ala Gln Tyr Tyr Val Asn Met Phe Asp Ala Glu Gln Gly Phe Phe Asp
 1             5             10             15
Arg Arg Ser Pro Gly Gly Glu Phe Gln Ala Gly Leu Asp Pro Glu Ser
          20             25             30
Trp Gly Gly Leu Phe Thr Glu Thr Asp Gly Trp Asn Phe Ala Phe His

```

```

      35              40              45
Ala Pro Gln Asp Gly Arg Gly Leu Ala Ala Leu Tyr Gly Gly Pro Lys
  50              55              60
Gly Leu Glu Asn Lys Leu Asp Ala Phe Phe Ala Thr Pro Glu Asn Ala
  65              70              75              80
Asp Lys Pro Ala Tyr Gly Gly Ile His Glu Met Val Glu Ala Arg Ala
      85              90              95
Val Arg Met Gly Gln Leu Gly Met Ser Asn Glu Pro Ser His His Ile
      100              105              110
Pro Tyr Ile Tyr Asn Tyr Ala Gly Ala
      115              120

<210> 443
<211> 430
<212> DNA
<213> Homo sapiens

<400> 443
accgggttacg gctcagtgc acaagagatg ttcgccaaca acctcgtgcg gatgccgctg
  60
ctcaggtgtc tggcaatccc cttcgccaag atcctctcga cgaccctgtc catcggatcg
  120
ggcggctccg cggcgtcttc cggccctggc atgggtcatcg gcggagccac tggcgcggca
  180
ctgtggcgcc tcctcgaggg gctgccaggt atcccatcct caccgatgag ttctgtcatt
  240
gtcggcatga tcgcctgctt cgggtgcggtt gcccatgccc cactcggcgt gctgctcatg
  300
gttggcgaga tgaccgga aa cctgtcgtcg ctcgctcctg gcatgatcgc cgtcgcgcgtc
  360
gctggccgag ttgtcgggga cacttcgatc tacacctctc agctcaagga tcgcctggag
  420
ggcgacgcgt
  430

<210> 444
<211> 143
<212> PRT
<213> Homo sapiens

<400> 444
Thr Gly Tyr Gly Ser Val Gln Gln Glu Met Phe Ala Asn Asn Leu Val
  1              5              10              15
Arg Met Pro Leu Leu Met Val Leu Ala Ile Pro Phe Ala Lys Ile Leu
      20              25              30
Ser Thr Thr Leu Ser Ile Gly Ser Gly Gly Pro Ala Ala Ser Ser Gly
      35              40              45
Pro Gly Met Val Ile Gly Gly Ala Thr Gly Ala Ala Leu Trp Arg Leu
      50              55              60
Leu Glu Gly Leu Pro Gly Ile Pro Ser Ser Pro Met Ser Phe Val Ile
  65              70              75              80
Val Gly Met Ile Ala Cys Phe Gly Ala Val Ala His Ala Pro Leu Gly
      85              90              95
Val Leu Leu Met Val Gly Glu Met Thr Gly Asn Leu Ser Leu Leu Ala

```

```

          100              105              110
Pro Gly Met Ile Ala Val Ala Val Ala Gly Arg Val Val Gly Asp Thr
      115              120              125
Ser Ile Tyr Thr Ser Gln Leu Lys Asp Arg Leu Glu Gly Asp Ala
      130              135              140

```

```

<210> 445
<211> 360
<212> DNA
<213> Homo sapiens

```

```

<400> 445
ccatggggcgt gcctagcctc tggggaggcc cctcagctgg tgacaccagc agggcagatt
60
tcttgcttta ttgctcacc tgtccagggt tccctctgtt tgtgaggagg ctgctgccac
120
cttgggtcca ggaagcatga agctccgcag gtcagcctcc tgggtgggagg acttttccct
180
agttttcttt gctcttctgc tctgagtcca gccctggctg gacctttgat cccttctctc
240
ttatcagga aattttctga ctttcttctt ttgccttttc aagatctgtg atgccatctc
300
caagtgggaa caagccatga aggagctgca ccccgaaaag tctgagggtg ggacacgcgt
360

```

```

<210> 446
<211> 101
<212> PRT
<213> Homo sapiens

```

```

<400> 446
Met Ala Cys Ser His Leu Glu Met Ala Ser Gln Ile Leu Lys Arg Gln
 1          5          10          15
Lys Lys Lys Val Arg Lys Phe Pro Asp Lys Glu Arg Arg Asp Gln Arg
 20          25          30
Ser Ser Gln Gly Trp Thr Gln Ser Arg Arg Ala Lys Lys Thr Lys Glu
 35          40          45
Lys Ser Ser His Gln Glu Ala Asp Leu Arg Ser Phe Met Leu Pro Gly
 50          55          60
Pro Lys Val Ala Ala Ala Pro Ser Gln Thr Glu Gly Thr Leu Asp Arg
 65          70          75          80
Val Ser Asn Lys Ala Arg Asn Leu Pro Cys Trp Cys His Gln Leu Arg
 85          90          95
Gly Leu Pro Arg Gly
100

```

```

<210> 447
<211> 487
<212> DNA
<213> Homo sapiens

```

```

<400> 447
acgcgtgaag ggggaaattg ctctgcccac ctgaggatta atcattaccc tggaaccctt
60

```

cccaaggcca tcaaggaaca cgcacccctt accagacett ccagctgctg ggggctctcc
 120
 gagtgaggct gaggtcatgg agaaggggaat ggggggcccc catggccagc tggacctgat
 180
 cactgcctcc cactcagcc acagccctca gggccctgtg ccagtcacaga agccattca
 240
 gggacacctt tgccaatgt tctgtttcat ctgagaggca accttcccca gtgcccacaac
 300
 catagcgttt tcccccaaac accctcagga aggaggggacc actacctgtg caggggggggc
 360
 caggagcctc ctgagagcct catatgggga ggaagtggta ccattcacc cccattgcct
 420
 ttctctccta cttccacctg gccagcttcc ctcaagtccc ctctcgcctc agtgccctt
 480
 cacgcgt
 487

<210> 448

<211> 117

<212> PRT

<213> Homo sapiens

<400> 448

Met	Glu	Lys	Gly	Met	Gly	Gly	Pro	His	Gly	Gln	Leu	Asp	Leu	Ile	Thr
1				5					10					15	
Ala	Ser	Pro	Leu	Ser	His	Ser	Pro	Gln	Gly	Pro	Val	Pro	Val	Gln	Lys
			20					25					30		
Pro	Ile	Gln	Gly	His	Leu	Trp	Pro	Met	Phe	Cys	Phe	Ile	Cys	Glu	Ala
		35					40					45			
Thr	Phe	Pro	Ser	Ala	Pro	Thr	Ile	Ala	Phe	Ser	Pro	Lys	His	Pro	Gln
		50				55					60				
Glu	Gly	Gly	Thr	Thr	Thr	Cys	Ala	Gly	Gly	Ala	Arg	Ser	Leu	Leu	Arg
65				70					75					80	
Ala	Ser	Tyr	Gly	Glu	Glu	Val	Val	Pro	Ser	His	Pro	His	Cys	Leu	Ser
			85						90				95		
Leu	Leu	Leu	Pro	Pro	Gly	Gln	Leu	Pro	Ser	Val	Pro	Leu	Leu	Pro	Gln
			100					105					110		
Cys	Pro	Phe	Thr	Arg											
			115												

<210> 449

<211> 353

<212> DNA

<213> Homo sapiens

<400> 449

gagctcagcc agttggagtt tgagaagcgg cagctgcaca gggacttgga gcaggccaag
 60
 gagaaggggg agcgggcaga gaagctggag agggagctac agcgactcca ggaggagaaac
 120
 gggaggctgg ccaggaaggt gacctccctg gagacagcca ccgagaaagt cgaggccctg
 180
 gagcatgaga gccaggcct gcagctggag aaccggactc tgaggaaatc tctggacacc
 240

ttgcagaacg tgtccctgca gcttgagggc ctggagcgtg acaacaagca gctggacgca
 300
 gagaacctgg agctgcgcag gctgttgag accatgcgga gacgacaacg cgt
 353

<210> 450

<211> 117

<212> PRT

<213> Homo sapiens

<400> 450

Glu Leu Ser Gln Leu Glu Phe Glu Lys Arg Gln Leu His Arg Asp Leu
 1 5 10 15
 Glu Gln Ala Lys Glu Lys Gly Glu Arg Ala Glu Lys Leu Glu Arg Glu
 20 25 30
 Leu Gln Arg Leu Gln Glu Glu Asn Arg Gly Arg Leu Ala Arg Lys Val Thr
 35 40 45
 Ser Leu Glu Thr Ala Thr Glu Lys Val Glu Ala Leu Glu His Glu Ser
 50 55 60
 Gln Gly Leu Gln Leu Glu Asn Arg Thr Leu Arg Lys Ser Leu Asp Thr
 65 70 75 80
 Leu Gln Asn Val Ser Leu Gln Leu Glu Gly Leu Glu Arg Asp Asn Lys
 85 90 95
 Gln Leu Asp Ala Glu Asn Leu Glu Leu Arg Arg Leu Val Glu Thr Met
 100 105 110
 Arg Arg Arg Gln Arg
 115

<210> 451

<211> 444

<212> DNA

<213> Homo sapiens

<400> 451

gtgatcgccc tgactaagcc tactttatcc accaatatcc cagtaacatg tgaagagaaa
 60
 gacttacctg gagatctctt taaccagctg atgagagatg atccttcaac cggttaatggt
 120
 gcagaagttt taatgttggg agaaatgctg acctttaccac agaatttttg gaatatattt
 180
 ttgggagaga ccttttccag ttatatcagc gttcataatg atagcaatca agttgtaaaa
 240
 gacatattag taaaagctga tcttcagaca agttctcagc gtttaaatct ttcagcctcc
 300
 aatgctgcag tggctgaact taaaccggat tggtgtattg atgatgtcat acatcatgaa
 360
 gtcaaagaaa ttggaacaca catcttggtg tgtgctgtga gttatacaac tcaggctgga
 420
 gaaaaaatgt atttcagaaa attt
 444

<210> 452

<211> 148

<212> PRT

<213> Homo sapiens

<400> 452

```

Val Met Arg Leu Thr Lys Pro Thr Leu Phe Thr Asn Ile Pro Val Thr
 1              5              10              15
Cys Glu Glu Lys Asp Leu Pro Gly Asp Leu Phe Asn Gln Leu Met Arg
      20              25              30
Asp Asp Pro Ser Thr Val Asn Gly Ala Glu Val Leu Met Leu Gly Glu
      35              40              45
Met Leu Thr Leu Pro Gln Asn Phe Gly Asn Ile Phe Leu Gly Glu Thr
      50              55              60
Phe Ser Ser Tyr Ile Ser Val His Asn Asp Ser Asn Gln Val Val Lys
      65              70              75              80
Asp Ile Leu Val Lys Ala Asp Leu Gln Thr Ser Ser Gln Arg Leu Asn
      85              90              95
Leu Ser Ala Ser Asn Ala Ala Val Ala Glu Leu Lys Pro Asp Cys Cys
      100              105              110
Ile Asp Asp Val Ile His His Glu Val Lys Glu Ile Gly Thr His Ile
      115              120              125
Leu Val Cys Ala Val Ser Tyr Thr Thr Gln Ala Gly Glu Lys Met Tyr
      130              135              140
Phe Arg Lys Phe
145

```

<210> 453

<211> 373

<212> DNA

<213> Homo sapiens

<400> 453

```

gctagctctg accccacctt tgccaagtgg cactagggtg gccaatgggg actagggttg
60
tataattgga aaatacagtc tcccctgttg tccaagaaa gccccagatg acctgggggt
120
tgaaaggcac tcccgctggg tgcttctctg gagcaggtgg ggggcagcgg ggcggcgggg
180
cctgtctgtg ctgagcatcc ccagctccag ggcaggtgct gggctctgag cccactgggt
240
gcgttttggg atgggctggc ctgcgcgggt gtcgtttcag agcacacaga agagaccctg
300
ccacaggagg agtgggagga gaagctgttg atgttctctg gagacaccct ggccatcatt
360
tctgacaacg cgt
373

```

<210> 454

<211> 108

<212> PRT

<213> Homo sapiens

<400> 454

```

Met Met Ala Arg Val Ser Arg Arg Asn Ile Asn Ser Phe Ser Ser His
 1              5              10              15
Ser Ser Cys Gly Arg Val Ser Ser Val Cys Ser Glu Thr Thr Ala Ala

```



```

      50              55              60
Glu Trp Ser Gly Tyr Leu Ile Ser Ile Cys Gly Met Asn Met Tyr Arg
65              70              75              80
Val Lys Pro Cys Ala Gln Asn Arg Leu Lys Ile Ser Ser Ile Pro Phe
      85              90              95
Leu Ala Thr Tyr
      100

```

<210> 457
 <211> 324
 <212> DNA
 <213> Homo sapiens

```

<400> 457
acgcgtcatg tggatattcc tgggaggttc ccaggaacgt ttctggacgg gcccccgacc
60
agaggtcagg gaacttttct tattattctg cacgtgccca gggatagtca aaccaggtct
120
tcccttctg ctggccgcaa cagcccgacc gccgccacga ccgcacgctg aattcatgac
180
ccgacacgcg acgtggcagc gagcacaccc accgctagga gaaagagcgc tcattcgaaga
240
tcgttttctg tccactggcc agcgccacta tgatcagggtg gggtatccgc ccggcgggcgg
300
gagcaccggg acgccggggc gccg
324

```

<210> 458
 <211> 105
 <212> PRT
 <213> Homo sapiens

```

<400> 458
Met Trp Ile Phe Leu Gly Gly Ser Gln Glu Arg Phe Trp Thr Gly Pro
1      5      10      15
Arg Pro Glu Val Arg Glu Leu Phe Leu Phe Cys Thr Cys Pro Gly
20      25      30
Ile Val Lys Pro Gly Leu Pro Leu Leu Leu Ala Ala Thr Arg Gln Pro
35      40      45
Pro Pro Arg Pro His Ala Glu Phe Met Thr Arg His Ala Thr Trp Gln
50      55      60
Arg Ala His Pro Pro Leu Gly Glu Arg Ala Leu Ile Glu Asp Arg Phe
65      70      75      80
Leu Ser Thr Gly Gln Arg His Tyr Asp Gln Val Gly Tyr Pro Pro Gly
85      90      95
Gly Gly Ser Thr Gly Thr Pro Gly Arg
100      105

```

<210> 459
 <211> 415
 <212> DNA
 <213> Homo sapiens

<400> 459

acgcggttcat tcggcatctg cttccatgga tttcctcgcg ggaggcgcg cgcagagtgc
 60
 ggggtgtcgaa caccagactt cagtgatcgt ttcaaccacc ggccgagatg ggtcctgacg
 120
 ctggggcttca agccgcttgc gctcgcgctc ctgatctcgg gcagcgcgat tccgggtggtt
 180
 tatgctgcgg gcagacgact gcgcacgccc ctcacgaggt atctgcacat gcttaagggg
 240
 agaggctcta cccgacagct gggcatcgga tttacgaagc ccacgacgaa tcttctctgc
 300
 ctctcctcaag ccatcatcgc gcatgccagg tttgtggttg aatgcttcga tcaacacact
 360
 aggatcggtg ggggtccacca catacaccga gcggcaatcg agcggatagc acctc
 415

<210> 460

<211> 105

<212> PRT

<213> Homo sapiens

<400> 460

Met	Pro	Met	Ile	Gly	Phe	Glu	Glu	Ala	Arg	Lys	Ile	Arg	Arg	Gly	Leu
1				5					10					15	
Arg	Lys	Ser	Asp	Ala	Gln	Leu	Ser	Gly	Glu	Ala	Ser	Pro	Phe	Lys	His
		20						25					30		
Val	Gln	Ile	Pro	Arg	Glu	Gly	Arg	Ala	Gln	Ser	Ser	Ala	Gly	Ser	Ile
		35						40					45		
Asn	His	Arg	Asn	Arg	Ala	Ala	Arg	Asp	Gln	Glu	Arg	Glu	Arg	Lys	Arg
	50					55					60				
Leu	Glu	Ala	Gln	Arg	Gln	Asp	Pro	Ser	Arg	Pro	Val	Val	Glu	Thr	Ile
	65				70				75					80	
Thr	Glu	Val	Ser	Cys	Ser	Thr	Pro	Ala	Leu	Ser	Ala	Ala	Pro	Pro	Arg
			85						90					95	
Arg	Lys	Ser	Met	Glu	Ala	Asp	Ala	Glu							
			100					105							

<210> 461

<211> 357

<212> DNA

<213> Homo sapiens

<400> 461

acgcgttcga ggtcggctaa atttatcatg cgcacgacaa agagagttagt gggtcacaaac
 60
 cgggtcacat gcatgatgac aaaaactggc agaataagagt tgatgtcatc ccgtctacca
 120
 gtcctctagaa ccagctcaga gagtcccggt gtcggtaccg tcgagactca gtacacaaact
 180
 gtcgcgatac cggacgaccc tcttcatctg gttgcagatg ggcgtctcaa tcacgtcact
 240
 gtcgcttacg aaacctacgg gaagctcaat acgtccagcg acaatgcggg ctatacctgt
 300
 catgcgctta ctgggtgatgc ccatgcagcc ggatttcacc ccggtgtagt ccgtccg
 357

<210> 462
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 462
 Thr Arg Ser Arg Ser Ala Lys Phe Ile Met Arg Thr Thr Lys Arg Val
 1 5 10 15
 Val Ala His Asn Arg Val Thr Cys Met Met Thr Lys Thr Gly Arg Ile
 20 25 30
 Glu Leu Met Ser Ser Arg Leu Pro Ala Pro Arg Thr Ser Ser Glu Ser
 35 40 45
 Pro Gly Val Gly Thr Val Glu Thr Gln Tyr Thr Thr Val Ala Ile Pro
 50 55 60
 Asp Asp Pro Leu His Leu Val Ala Asp Gly Arg Leu Asn His Val Thr
 65 70 75 80
 Val Ala Tyr Glu Thr Tyr Gly Lys Leu Asn Thr Ser Ser Asp Asn Ala
 85 90 95
 Val Tyr Thr Cys His Ala Leu Thr Gly Asp Ala His Ala Ala Gly Phe
 100 105 110
 His Pro Gly Val Val Arg Pro
 115

<210> 463
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 463
 gtgcacgggg tatgcgaggg atgcggcatt gccaccaatg ccgctgacct ggcagatac
 60
 gaggcagctg gtgacgatga agtggtgcga tgcgaggaat gcgatcgat cctggtgctg
 120
 accggagagt ccatctgagc ccttcttctg gcggtgatgc cgggatatcc gtagaattag
 180
 cggtcggacg agccatccgg gtgatcgcg cagcggtagg ttgtcgagga aagtcggggc
 240
 tccatagagc aggggtggtgg gtaacgccca cccgggggtga cccgcgggaa agtgccacag
 300
 agaacagact gccggtttcg agccggtagg ggtgaaacgg tggagtaagt gccaccgcg
 360
 tcatcggtga cggtgacggc atggcacaac ccacctggag caaggccaag aagacctga
 420
 ggctcgcgac gcgt
 434

<210> 464
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 464
 Met Pro Ser Pro Ser Pro Met Thr Arg Trp Ala Leu Thr Pro Pro Phe

```

      1             5             10             15
His Pro His Arg Leu Glu Thr Gly Ser Leu Phe Ser Val Ala Leu Ser
      20
Arg Gly Ser Pro Arg Val Gly Val Thr His His Pro Ala Leu Trp Ser
      35
Pro Asp Phe Pro Arg Gln Leu Thr Ala Ala Ala Ile Thr Arg Met Ala
      50
Arg Pro Thr Ala Asn Ser Thr Asp Ile Pro Ala Ser Pro Pro Gln Glu
      65
Gly Leu Arg Trp Thr Leu Arg Tyr Ala Pro Gly Tyr Asp Arg Ile Pro
      85
Arg Ile Ala Pro Leu His Arg His Gln Leu Pro Arg Ile Cys Ala Gly
      100
Gln Arg His Trp Trp Gln Cys Arg Ile Pro Arg Ile Pro Arg Ala
      115
      120

```

<210> 465

<211> 438

<212> DNA

<213> Homo sapiens

<400> 465

```

gatcatttag aatttatgga agaagctgat gtgaaagcta tgggtcaaatc tggcactgtg
60
gctgtattgc taccaggagc attttacacc ttgaaagaaa ctcaacttcc accgatgaat
120
ttgttacgct agtacggagt agacattgct atttcgacgg atgctaatacc agggacgtcg
180
ccagcgttat cattacggtt aatgatgaat atggcatgta ccttgtttgg tatgacacct
240
gaaaccgccc ttgcaggggt aacaattcat gcggcaaaa cgttggggat tagcgattct
300
catggcactt tagaagtgg caaggtagct gattttgtct gctgggatgt ggaagcccc
360
gggtgaacttt gttattgggt aggagagcag ttagtaaac aacgtattca gcacggagta
420
tcccatgaat aatctaga
438

```

<210> 466

<211> 143

<212> PRT

<213> Homo sapiens

<400> 466

```

Asp His Leu Glu Phe Met Glu Glu Ala Asp Val Lys Ala Met Val Lys
      1             5             10             15
Ser Gly Thr Val Ala Val Leu Leu Pro Gly Ala Phe Tyr Thr Leu Lys
      20
Glu Thr Gln Leu Pro Pro Met Asn Leu Leu Arg Gln Tyr Gly Val Asp
      35
Ile Ala Ile Ser Thr Asp Ala Asn Pro Gly Thr Ser Pro Ala Leu Ser
      50
Leu Arg Leu Met Met Asn Met Ala Cys Thr Leu Phe Gly Met Thr Pro
      55
      60

```

```

65              70              75              80
Glu Thr Ala Leu Ala Gly Val Thr Ile His Ala Ala Lys Ala Leu Gly
      85              90              95
Ile Ser Asp Ser His Gly Thr Leu Glu Val Gly Lys Val Ala Asp Phe
      100             105             110
Val Cys Trp Asp Val Glu Ser Pro Gly Glu Leu Cys Tyr Trp Leu Gly
      115             120             125
Glu Gln Leu Val Lys Gln Arg Ile Gln His Gly Val Ser His Glu
      130             135             140

```

<210> 467

<211> 460

<212> DNA

<213> Homo sapiens

<400> 467

```

ntttccctgg ctattggcca tgtgggacac aacgttccgc ctaccccca gcggttaagc
60
tgcatccctg caccttcttc tcccaccgct tcaaagccac agtgaggaaac ttcggagctt
120
ctcgcaagtga agatggcggt ggaggaatgg atgccctggc tagaagagggc ggaatatctg
180
ttgattgtgt ggaccgacca caaaaacctg gagtatctcc acacaaccaa gtgcctcaac
240
tccaggcaag caagaagggc ccagctgttt acctggttcc acttttccct ctccctaccgg
300
ccgggggtcca agaacatcag gctggatgcc ctttcttgcc actttatggg catgggcccc
360
ttctccagg cttgctgtc acccggggctc ccgtcaaacc ctggccttcg tgcgacaaca
420
ctcttggtgc cttctatggt tctgtatggt gccgcaattg
460

```

<210> 468

<211> 118

<212> PRT

<213> Homo sapiens

<400> 468

```

Gly Thr Ser Glu Leu Leu Ala Val Lys Met Ala Leu Glu Glu Trp Met
 1              5              10             15
Pro Trp Leu Glu Glu Ala Glu Tyr Leu Leu Ile Val Trp Thr Asp His
      20             25             30
Lys Asn Leu Glu Tyr Leu His Thr Thr Lys Cys Leu Asn Ser Arg Gln
      35             40             45
Ala Arg Arg Ala Gln Leu Phe Thr Trp Phe His Phe Ser Leu Ser Tyr
      50             55             60
Arg Pro Gly Ser Lys Asn Ile Arg Leu Asp Ala Leu Ser Cys His Phe
65              70              75              80
Met Gly Met Gly Pro Phe Leu Gln Ala Cys Leu Ser Pro Gly Leu Pro
      85              90              95
Ser Asn Pro Gly Leu Arg Ala Thr Thr Leu Leu Val Pro Ser Met Val
      100             105             110
Leu Tyr Val Ala Ala Ile

```

115

<210> 469

<211> 381

<212> DNA

<213> Homo sapiens

<400> 469

ctgtgcaca cgttattttt ccaatacaaa tagtttaaaa agtaaactcc aaatacctat
 60
 aagccccctc aaagcacctt ccaaatatga accttgtaa tgcccaaggc ccagaggggt
 120
 cccccagaaa ggcccaggag cctggggcat gggaaagctg tcgggggtccc catgctgact
 180
 ccctggactc caagcgatat tccataaagc cagggcctcc tggctgcggg agggaggcct
 240
 tgaccacaaa tccattcggc cctggatact ggagaggcag aggcctctgc tgatgagaag
 300
 ccctgagttc ctggctagct gtggtaacc acaaaaaatg cgggggggtga tgattttcga
 360
 agtccatcgg caaagaaaga c
 381

<210> 470

<211> 110

<212> PRT

<213> Homo sapiens

<400> 470

Met	Asp	Phe	Glu	Asn	His	His	Pro	Pro	His	Phe	Leu	Trp	Leu	Thr	Thr
1				5					10					15	
Ala	Ser	Gln	Glu	Leu	Arg	Ala	Ser	His	Gln	Gln	Arg	Pro	Leu	Pro	Leu
			20					25					30		
Gln	Tyr	Pro	Gly	Pro	Asn	Gly	Phe	Trp	Val	Lys	Ala	Ser	Leu	Pro	Gln
		35				40					45				
Pro	Gly	Gly	Pro	Gly	Phe	Met	Glu	Tyr	Arg	Leu	Glu	Ser	Arg	Glu	Ser
		50				55				60					
Ala	Trp	Gly	Pro	Arg	Gln	Leu	Ser	His	Ala	Pro	Gly	Ser	Trp	Ala	Phe
65					70				75					80	
Leu	Gly	Asp	Pro	Ser	Gly	Pro	Trp	Ala	Leu	Thr	Arg	Phe	Ile	Phe	Gly
				85					90				95		
Arg	Cys	Phe	Glu	Gly	Ala	Tyr	Arg	Tyr	Leu	Glu	Phe	Thr	Phe		
			100					105					110		

<210> 471

<211> 378

<212> DNA

<213> Homo sapiens

<400> 471

accggtgact acctgcagca ctggattgac atgggtaaaa agggcggcga ccgcatgccca
 60
 gaggtcttcc tggttaactg gttccgcccg ggcgacgatg gccgcttctc gtggccgnng
 120

cttggcgaaa acttcccggt cctanagtgg atcatcgacc gcattgaagg caacgtagag
 180
 gccgaggaca cgggtggtcgg acgcaccgcc cgcgccgagg acatcgactt gcaaggcctt
 240
 gacttcgatg tcgacgacgt tcgcgccgca ctgcgccgtg acccgaagga atgggaaggc
 300
 gatatgcaag acaacgccga gtacctgaac ttcttgggct cccgcgtgcc cgagggaagt
 360
 tggaaccagt tccgcgcc
 378

<210> 472

<211> 126

<212> PRT

<213> Homo sapiens

<400> 472

Thr	Gly	Asp	Tyr	Leu	Gln	His	Trp	Ile	Asp	Met	Gly	Lys	Lys	Gly	Gly
1				5					10					15	
Asp	Arg	Met	Pro	Glu	Val	Phe	Leu	Val	Asn	Trp	Phe	Arg	Arg	Gly	Asp
			20					25					30		
Asp	Gly	Arg	Phe	Leu	Trp	Pro	Xaa	Leu	Gly	Glu	Asn	Phe	Pro	Val	Leu
			35				40					45			
Xaa	Trp	Ile	Ile	Asp	Arg	Ile	Glu	Gly	Asn	Val	Glu	Ala	Glu	Asp	Thr
	50					55				60					
Val	Val	Gly	Arg	Thr	Ala	Arg	Ala	Glu	Asp	Ile	Asp	Leu	Gln	Gly	Leu
65				70					75					80	
Asp	Phe	Asp	Val	Asp	Val	Arg	Ala	Ala	Leu	Ala	Val	Asp	Pro	Pro	Lys
			85				90					95			
Glu	Trp	Glu	Gly	Asp	Met	Gln	Asp	Asn	Ala	Glu	Tyr	Leu	Asn	Phe	Leu
			100				105					110			
Gly	Ser	Arg	Val	Pro	Glu	Glu	Val	Trp	Asn	Gln	Phe	Arg	Ala		
	115						120					125			

<210> 473

<211> 339

<212> DNA

<213> Homo sapiens

<400> 473

accggttggt gggggaagg acccatccca tgccacctgt cctagaaat gtttcccctt
 60
 gttgagcagc tgctggatct agggctgctg ggtctaagtc caaaaaggga aaaaggaaaa
 120
 aggcaccaag taaaagaagg gggaagctgc caaaaccccc cctgccaaaa ctctcccacc
 180
 ctgcttccat ttccctctcc agggaaacagg tgtacctccc ctctccctg tcctcctcag
 240
 atgccccagg ggctctctac ttcatctctg ccgaccctgc caggagtggc ctcaggggta
 300
 gaggttccta gttggagaat ttgcttcag gaaggtgaa
 339

<210> 474

<211> 97

<212> PRT

<213> Homo sapiens

<400> 474

```

Met Phe Pro Leu Val Glu Gln Leu Leu Asp Leu Gly Leu Leu Gly Leu
 1             5             10             15
Ser Pro Lys Arg Glu Lys Gly Lys Arg His Gln Val Lys Glu Gly Gly
      20             25             30
Ser Cys Gln Asn Pro Pro Cys Gln Asn Ser Pro Thr Leu Leu Pro Phe
      35             40             45
Pro Ser Pro Gly Asn Arg Cys Thr Ser Pro Pro Cys Pro Pro Gln
      50             55             60
Met Pro Gln Gly Leu Ser Thr Ser Phe Leu Pro Thr Leu Pro Gly Val
 65             70             75             80
Ala Ser Gly Val Glu Ala Pro Ser Trp Arg Ile Cys Leu Gln Glu Gly
      85             90             95
Glu

```

<210> 475

<211> 345

<212> DNA

<213> Homo sapiens

<400> 475

```

acgcgtgaag ggtccctcc aaactctgag cctccttcca agccttgctg ggagctcccc
 60
agcgccctgcc ggagaggcct ctctccagg cgggcttccc gcgccgatgt gaaggagagg
 120
ctgccccaga ggggtctgga tcgtaatcca gaaagggaca gtcccacagc cataatcccc
 180
aatgctggga ctcttcagta aaggaagaga tggctttttc gttcatctgc ctttctgaaa
 240
ggtaaaatat ctccagatcc gggctctctg ggcgactgcg tatgtggggg tccttgaagc
 300
ctttgatgga tcttgtaga agtgggttgt tcatcttggg gtttt
 345

```

<210> 476

<211> 111

<212> PRT

<213> Homo sapiens

<400> 476

```

Met Asn Asn Pro Leu Leu Thr Arg Ser Ile Lys Gly Phe Arg Asp Pro
 1             5             10             15
His Ile Arg Ser Arg Pro Glu Ser Pro Asp Leu Glu Ile Phe Tyr Leu
      20             25             30
Ser Glu Arg Gln Met Asn Glu Lys Ala Ile Ser Ser Phe Thr Glu Glu
      35             40             45
Ser Gln His Ser Gly Leu Trp Leu Trp Asp Cys Pro Phe Leu Asp Tyr
      50             55             60
Asp Pro Asp Pro Ser Gly Ala Ala Ser Pro Ser His Arg Arg Gly Lys

```

```

65              70              75              80
Pro Ala Trp Arg Arg Gly Leu Ser Gly Arg Arg Trp Gly Ala Pro Ser
              85              90              95
Lys Ala Trp Lys Glu Ala Gln Ser Leu Glu Gly Thr Leu His Ala
              100              105              110

```

<210> 477

<211> 422

<212> DNA

<213> Homo sapiens

<400> 477

```

acgcgtggcc gagccagcgt gctcaaggaa atgggtcaacg gcactcttat taacggctgg
60
gactctcccc aggtggaacg ggccactggac ctgtgcatgg cgtgcaaaagg gtgcgccccga
120
gattgccccca ccggaatcga catggccagc taccgcagca cggttcttga cgaataatc
180
cgtcaccgtc tccgcctcgc ctcccacctg acgatggggc tgctgccccat gtgggaacgt
240
ttgctcaate ggaccccagg agcggccgtcg ctggctaacg cagtgtcttc gatgccggtc
300
ttcgcacgtc ttgctagatg gacagccggg gtggatcagc gtcgtcccct cccccattc
360
cagccctcgg ccagattggc cagtcgcgag gccgccccgg ttaaggagat tgtggcggat
420
cc
422

```

<210> 478

<211> 140

<212> PRT

<213> Homo sapiens

<400> 478

```

Thr Arg Gly Arg Ala Ser Val Leu Lys Glu Met Val Asn Gly Thr Leu
1              5              10              15
Ile Asn Gly Trp Asp Ser Pro Glu Val Glu Arg Ala Leu Asp Leu Cys
              20              25              30
Met Ala Cys Lys Gly Cys Ala Arg Asp Cys Pro Thr Gly Ile Asp Met
              35              40              45
Ala Ser Tyr Arg Ser Thr Val Leu Asp Glu Lys Tyr Arg His Arg Leu
50              55              60
Arg Pro Arg Ser His Leu Thr Met Gly Leu Leu Pro Met Trp Glu Arg
65              70              75              80
Leu Leu Asn Arg Thr Pro Gly Ala Pro Ser Leu Ala Asn Ala Val Leu
              85              90              95
Ser Met Pro Val Phe Ala Arg Leu Ala Arg Trp Thr Ala Gly Val Asp
100              105              110
Gln Arg Arg Pro Leu Pro Arg Phe Gln Pro Ser Ala Arg Leu Ala Ser
115              120              125
Pro Gln Ala Ala Pro Val Lys Glu Ile Val Ala Asp
130              135              140

```


<210> 479

<211> 348

<212> DNA

<213> Homo sapiens

<400> 479

cgcggtggcca ttggccgggc gctggtgctgg caccgcgac tggtgattgc cgaatgagccg
 60
 atctcggcgct tggacatgac catccagaag cagattcttg agctgttcga ggccttgacg
 120
 gcgcagtagc gctttgcttg cctgttcacg tcccacgacc tggcagcggg ggaacgcacg
 180
 gcccaccggg tggcggtgat gagcgagggc aggggtggtgg aaatgggtgc ccgcgacgag
 240
 atcttcgacc gcccgagca ccctacacc cgcaagctgc tggccgcgcg cagccccttg
 300
 gagaaacttg aaaacggtgg ctaccgcacg cgccaggggc ccgtaccg
 348

<210> 480

<211> 116

<212> PRT

<213> Homo sapiens

<400> 480

Arg Val Ala Ile Gly Arg Ala Leu Val Arg His Pro Arg Leu Val Ile
 1 5 10 15
 Ala Asp Glu Pro Ile Ser Ala Leu Asp Met Thr Ile Gln Lys Gln Ile
 20 25 30
 Leu Glu Leu Phe Glu Arg Leu Gln Ala Gln Tyr Gly Phe Ala Cys Leu
 35 40 45
 Phe Ile Ser His Asp Leu Ala Ala Val Glu Arg Ile Ala His Arg Val
 50 55 60
 Ala Val Met Ser Glu Gly Arg Val Val Glu Met Gly Ala Arg Asp Glu
 65 70 75 80
 Ile Phe Asp Arg Pro Gln His Pro Tyr Thr Arg Lys Leu Leu Ala Ala
 85 90 95
 Ala Ser Pro Leu Glu Lys Leu Glu Asn Gly Gly Tyr Arg Ile Arg Gln
 100 105 110
 Gly Pro Val Pro
 115

<210> 481

<211> 441

<212> DNA

<213> Homo sapiens

<400> 481

aagcttctga ctgtggcatt ctccctgctt aatatgtcct caatatcccc tacttactgg
 60
 gcaaaatcct gcttatgctt tgggactagc tcaaagacca ctcccttgga tgggtgccttc
 120
 cctgcccctgc cggtctgcgc tggcttcctc agtggttagga ttaccatcac attgcatcat
 180

gagagcagaa gaccatctcc atgtgactgc tgccctgtct cccagcaggg cccacaanca
 240
 cccagtcag gacctggctc acgctgggtg gcggatgcc aggaatgggg ctctggatct
 300
 gcctcttctc ctgcaggacc aggaaccgc tgccctgtcc ctgccccagg aaacctctag
 360
 taaatcccca gtcatttgag ttccccctca gcgccagaga ccaataacac atctccacca
 420
 acctgaaaaa ccttcacgcy t
 441

<210> 482

<211> 120

<212> PRT

<213> Homo sapiens

<400> 482

Lys Leu Leu Thr Val Ala Phe Ser Leu Leu Asn Met Ser Ser Ile Ser
 1 5 10 15
 Pro Thr Tyr Trp Ala Lys Ser Cys Leu Cys Phe Gly Thr Ser Ser Lys
 20 25 30
 Thr Thr Pro Leu Asp Gly Ala Phe Pro Ala Leu Pro Ala Cys Ala Gly
 35 40 45
 Phe Leu Ser Val Arg Ile Thr Ile Thr Leu His His Glu Ser Arg Arg
 50 55 60
 Pro Ser Pro Cys Asp Cys Cys Pro Cys Ser Gln Gln Gly Pro Gln Xaa
 65 70 75 80
 Pro Ser Pro Gly Pro Gly Ser Arg Trp Val Ala Asp Ala Gln Glu Trp
 85 90 95
 Gly Ser Gly Ser Ala Ser Ser Pro Ala Gly Pro Gly Asn Arg Cys Pro
 100 105 110
 Val Pro Ala Pro Gly Asn Pro Gln
 115 120

<210> 483

<211> 330

<212> DNA

<213> Homo sapiens

<400> 483

acgcgttcac tccctgatgg ccacgcacga gctaaccggag ggatggggcg aaggggaaggc
 60
 caaggttgcc tcgaagacca aggagtgtgc agggcaggac ctcgcttttaa aggaatatcc
 120
 tctcaccaga gacacgcggc ggccaggcag ggccggagcg gggcctgtgc ccaggctccg
 180
 agcgtctgcc cagccacaga tccctgtccc cagccaggaa tatgtcttcg tggcatagag
 240
 ggagctcttg gagccacacc tgcgtgtgca catgtgtcac cccactgctg ggaggggctc
 300
 tcccgggacc ctgcagcgtg ggctggggcc
 330

<210> 484

<211> 96

<212> PRT

<213> Homo sapiens

<400> 484

```

Met Gly Arg Arg Glu Gly Gln Gly Cys Leu Glu Asp Gln Gly Val Cys
 1             5             10             15
Arg Ala Gly Pro Arg Phe Lys Gly Ile Ser Ser His Gln Arg His Ala
      20             25             30
Ala Ala Arg Gln Gly Arg Ser Gly Ala Cys Ala Gln Ala Pro Ser Val
      35             40             45
Cys Pro Ala Gln His Pro Cys Pro Gln Pro Gly Ile Cys Leu Arg Gly
      50             55             60
Ile Glu Gly Ala Leu Gly Ala Thr Pro Ala Cys Ala His Val Ser Pro
      65             70             75             80
His Cys Trp Glu Gly Leu Ser Arg Asp Pro Ala Ala Trp Ala Gly Pro
      85             90             95

```

<210> 485

<211> 377

<212> DNA

<213> Homo sapiens

<400> 485

```

acgcggtgctc gcgcggacga agtcggcgct gatcgcccag tcatgcgccc tgcccgtgcc
60
gccagttcgc gcgatcgccg cattcggccg gccggaatcg agaaggaatg cgtggacgta
120
cggggggatac caaaggaatc ttgtcgaggg cttcgcggcc ctcgacgtgg atcacctgta
180
cccgacgggac gtgggggaagc cgtcccgcaa gtcacaggga ctcgcgcaca tcgatgtgcg
240
atacgatttg caccgtcgtc ggctgcgtgc gcgacacatg ctcgcgcgac gcctcagcgg
300
tggtttccga cgtcagcagg aacgtggcga cgggtggcat ggcggtgcgc gttatgtcgg
360
cattccatt cctcggg
377

```

<210> 486

<211> 111

<212> PRT

<213> Homo sapiens

<400> 486

```

Met Arg Pro Ala Arg Ala Ala Gln Phe Gly Asp Arg Arg Ile Arg Pro
 1             5             10             15
Ala Gly Ile Glu Lys Glu Cys Val Asp Val Arg Gly Ile Pro Lys Glu
      20             25             30
Ser Cys Arg Gly Leu Arg Gly Pro Arg Arg Gly Ser Pro Val Pro Asp
      35             40             45
Gly Arg Gly Glu Ala Val Pro Gln Ala His Gly Thr Pro Arg His Arg
      50             55             60
Cys Ala Ile Arg Phe Ala Pro Ser Ser Ala Ala Cys Ala Thr His Ala

```

```

65              70              75              80
Pro Arg Ser Pro Gln Arg Trp Phe Pro Thr Ser Ala Gly Thr Trp Arg
              85              90              95
Arg Val Ala Trp Arg Ser Pro Leu Cys Arg His Ser His Ser Ser
              100              105              110

```

<210> 487

<211> 459

<212> DNA

<213> Homo sapiens

<400> 487

```

nnacgcgtaa gatcgattgt ggatcagcac cgatgctggt cccccgacg ttgttgttgg
60
cgggtgttgt tgtaaggagt gtgtgtgatg cgtgttggtg ttccactga ggtaaagaat
120
agtgaagttc gtgtggctgt gacgccggcg ggtgttcacg cggttggttg tcgtgggtcat
180
gaggtgttgg ttcaggctgg tgctgggtgt gggtcgggta ttccggatcc ggatttttgt
240
gggtgctggg cgccgggtgt ggggtgatgt gagtccgtgt ggggtgatgc tgatttgggt
300
ttgaaggatga aggagcctgt tgcggaggag tatgggagggt tgcgatgagg tttgggtctt
360
tttactgtac ttcatttggc tgctgatgag gcgttgactc gtgagctttt ggggcgtggg
420
gtgacgtcga ttgcgtatga gacgggtggag ttggccgat
459

```

<210> 488

<211> 124

<212> PRT

<213> Homo sapiens

<400> 488

```

Met Arg Val Gly Val Pro Thr Glu Val Lys Asn Ser Glu Phe Arg Val
1      5      10      15
Ala Val Thr Pro Ala Gly Val His Ala Leu Val Gly Arg Gly His Glu
20      25      30
Val Leu Val Gln Ala Gly Ala Gly Val Gly Ser Gly Ile Pro Asp Ser
35      40      45
Asp Phe Val Gly Ala Gly Ala Arg Val Val Gly Asp Val Glu Ser Val
50      55      60
Trp Gly Asp Ala Asp Leu Val Leu Lys Val Lys Glu Pro Val Ala Glu
65      70      75      80
Glu Tyr Gly Arg Leu His Glu Gly Leu Val Leu Phe Thr Tyr Leu His
85      90      95
Leu Ala Ala Asp Glu Ala Leu Thr Arg Glu Leu Leu Gly Arg Gly Val
100     105     110
Thr Ser Ile Ala Tyr Glu Thr Val Glu Leu Ala Asp
115     120

```

<210> 489

<211> 542

<212> DNA

<213> Homo sapiens

<400> 489

nacgcgtttg gcgtactgag tgcgggtggtg gatggcgacg acagtggcaa gccgctgctc
 60
 aaccagcacg gttgctacaa agtgcgcttt ccatttaccg cgcatacaaa gccagcactc
 120
 cgggggttcgg catggctgcg caggggtgtcg ttgtctgccg gttccagcca tggcatgcac
 180
 ttcccgctgc tcaaaggcag tgaagtgttg gtgtcatttc tggggggcgga ccccgaccgg
 240
 ccgattatcg ttggctgctg accaaactcg gaaaccccgga gcatggtcgt tgagcgtaac
 300
 gccaccacga gcgcttctc cacggccgga gggcacttcc tggcgatgga agaccacccc
 360
 ggggctgccc atctgaagct ggggtgcgct ggcggaaca gcgtcttcac actgggcaat
 420
 ggcaaaagtcg ccggcgcgca actgcgcacc aacgccccac atgaattga catcgtcttc
 480
 gctcaaacac gaagtgcggc gcgtgtactc attgtcgatg ggcaccgggg acccgcgggc
 540
 cg
 542

<210> 490

<211> 180

<212> PRT

<213> Homo sapiens

<400> 490

Xaa	Ala	Phe	Gly	Val	Leu	Ser	Ala	Val	Val	Asp	Gly	Asp	Asp	Ser	Gly	1	5	10	15
Lys	Pro	Leu	Leu	Asn	Gln	His	Gly	Cys	Tyr	Lys	Val	Arg	Phe	Pro	Phe	20	25	30	
Thr	Arg	Asp	Gln	Lys	Pro	Ser	Thr	Arg	Gly	Ser	Ala	Trp	Leu	Arg	Arg	35	40	45	
Val	Ser	Leu	Ser	Ala	Gly	Ser	Ser	His	Gly	Met	His	Phe	Pro	Leu	Leu	50	55	60	
Lys	Gly	Ser	Glu	Val	Leu	Val	Ser	Phe	Leu	Gly	Gly	Asp	Pro	Asp	Arg	65	70	75	80
Pro	Ile	Ile	Val	Gly	Cys	Val	Pro	Asn	Ser	Glu	Thr	Pro	Ser	Met	Val	85	90	95	
Val	Glu	Arg	Asn	Ala	Thr	Gln	Ser	Gly	Phe	Ser	Thr	Ala	Gly	Gly	His	100	105	110	
Phe	Leu	Ala	Met	Glu	Asp	His	Pro	Gly	Ala	Ala	His	Leu	Lys	Leu	Gly	115	120	125	
Ala	Pro	Gly	Gly	Asn	Ser	Val	Phe	Thr	Leu	Gly	Asn	Gly	Lys	Val	Ala	130	135	140	
Gly	Ala	Gln	Leu	Arg	Thr	Asn	Ala	Pro	His	Ala	Ile	Asp	Ile	Val	Phe	145	150	155	160
Ala	Gln	Thr	Arg	Ser	Ala	Arg	Arg	Val	Leu	Ile	Val	Asp	Gly	His	Arg	165	170	175	
Gly	Pro	Gly	Gly																

180

<210> 491

<211> 825

<212> DNA

<213> Homo sapiens

<400> 491

nacgcgtcga ggcgacggtc ggcgccgtca tggcgactgt tctcgagggc acatgggaac
 60
 gcatcgggtgc cggattccgg actgccttaa ccacagcctt ggaacgcacc gatgaatggg
 120
 tggggcgccc tgacagcaag cccctcaacg aagtcgagac actgcgccgg tgcgccgatg
 180
 aactcatcgg cgggcccgtc ggcgcggttg ccgcgatgca cggaggggtca atcgaattgg
 240
 tcgacgtgtc ggtcgggtgac gaagagcgca gagtgcagct caccatgaag ggagcatgcc
 300
 gaggttgccc ggcagccatc agaccctaca tcagcgccgtg gaacatcaac tgagtctgcg
 360
 nattgcgcga gccgggtcacc gtgcgggaaa tctgacacct actccgacag ctccacctcg
 420
 acgagcacct ccacgacgag gccaaaggcc tcgtagacgc attcctcctc ggcatccaat
 480
 tcctccgggg ccgcccggag gacttcgtcg gcagtaacct ggtgatgat cctagcctg
 540
 gcggccatca tgccacgcag cgcattgaca gtacgaagcc aacgttgctg catcacaggg
 600
 ttcattggaga tacagccggt tcggtgcaac gtctccacat cagcacttaa ggactgagcg
 660
 tcttcccagc gcgcccgcac atcctcggcg tcattggtgca catggaattg cgcgtcagct
 720
 gagtgcgtgt cagcataggg gctggggcagg atcaatcgac gcacctcgct gtctcctggt
 780
 agtccagaaa actggctctc ccaaaaagcg aacgggtccc cctcc
 825

<210> 492

<211> 58

<212> PRT

<213> Homo sapiens

<400> 492

Met Asn Gly Trp Ala Leu Thr Ala Ser Pro Ser Thr Lys Ser Arg
 1 5 10 15
 His Cys Ala Gly Ala Pro Met Asn Ser Ser Ala Gly Pro Ser Ala Arg
 20 25 30
 Leu Pro Arg Cys Thr Glu Gly Gln Ser Asn Trp Ser Thr Cys Arg Ser
 35 40 45
 Val Thr Lys Ser Ala Glu Ser Thr Ser Pro
 50 55

<210> 493

<211> 863

<212> DNA

<213> Homo sapiens

<400> 493

nacgcgttcc aacctcgta aaacggctat cgcaggaaat gacccaact ggggtcgcat
 60
 cctcgcggcg atcggatgtg ttcttgagaa tatagctccc ttccatcccc accagggtga
 120
 tgtgtccatc aatgacattc agatctgtaa ggccgggggt atcggggagg accgcaacct
 180
 cgtcgatatg agggccacgag aggttcacat cgatattgag ctgcatgcgg gtgatgccga
 240
 agctgcggta tggactaatg atctgaccca ccaatacgtc gaagagaata ggcggtatac
 300
 atcatgaccc ttgctcttga catccccctc aacgactccc agttctcggc tcagcggaaa
 360
 tctgagggtc tggtagaagc gctgccttgg atcaggcgggt ttccagggcgg cactgtcgtc
 420
 gtgaaatatg gcggcaacgc gatgggtgat cccggtctgc agcaggcctt cgccgacgac
 480
 attgtgttta tggcctctgt ggggattcgc cctattgtcg tccacgggtg tggccctcag
 540
 atcaatgccca tgcttgctga atccgctacc ccggtggagt tccgtaattg tttgcgggtg
 600
 acatctccgg aggtcatgga ggttgctccg atggtgctcg tcgggcagggt gggccgtcag
 660
 ctcgtaaacg gaatcaacgc ctatgcgccg ctagcagctg gcatgtcagg cgaggacttt
 720
 ggcctttttt cgccccggaa gtcgcgggta attgttgatg gcgagcaaat agacatgggt
 780
 ttagtgggag acatcggtga cgtcaacatc gatctcgta tctctatgct tgatcgcgggt
 840
 cagattccgg tcattgcacc ggt
 863

<210> 494

<211> 186

<212> PRT

<213> Homo sapiens

<400> 494

Met Thr Leu Ala Leu Asp Ile Pro Leu Asn Asp Ser Gln Phe Ser Ala
 1 5 10 15
 Gln Arg Lys Ser Glu Val Leu Val Glu Ala Leu Pro Trp Ile Arg Arg
 20 25 30
 Phe Gln Gly Arg Thr Val Val Val Lys Tyr Gly Gly Asn Ala Met Val
 35 40 45
 Asp Pro Gly Leu Gln Gln Ala Phe Ala Asp Asp Ile Val Phe Met Ala
 50 55 60
 Ser Val Gly Ile Arg Pro Ile Val Val His Gly Gly Gly Pro Gln Ile
 65 70 75 80
 Asn Ala Met Leu Ala Glu Ser Ala Thr Pro Val Glu Phe Arg Asn Gly
 85 90 95
 Leu Arg Val Thr Ser Pro Glu Val Met Glu Val Val Arg Met Val Leu

```

          100              105              110
Val Gly Gln Val Gly Arg Gln Leu Val Asn Arg Ile Asn Ala Tyr Ala
      115              120              125
Pro Leu Ala Ala Gly Met Ser Gly Glu Asp Phe Gly Leu Phe Ser Ala
      130              135              140
Arg Lys Ser Arg Val Ile Val Asp Gly Glu Gln Ile Asp Met Gly Leu
      145              150              155              160
Val Gly Asp Ile Val Asp Val Asn Ile Asp Leu Val Ile Ser Met Leu
      165              170              175
Asp Arg Gly Gln Ile Pro Val Ile Ala Pro
      180              185

```

<210> 495

<211> 514

<212> DNA

<213> Homo sapiens

<400> 495

```

gcgcgcgaca ccggtgcccc gattagcgtg ccagtgagggtg acgtcactaa gggtcacgtc
60
tggaatgtga caggtgacgt tcttaacgcc ngatccctcc acaatcgagg tgacnntgag
120
cgttggccga tccaccggga tcccccgccc ttcgatgacc ttgagcccgga gaccgagatg
180
ctggagaccg gtattaaggt ccttgacttg ctgactcctt acgtcaagggt cggcaagatt
240
ggcctctttg gcgcgcgtgg tgtgggtaag acggtgctca ttcaggagat gatttaccgt
300
atcgcccaca acttcggcgg tacttcggtt ttcgccggtg tcggtgagcg taccgcgag
360
ggtaacgacc tcataacga gatggacgag gccggtgtgc tcaaagacac cgccctggta
420
ttcggccaga tggacgagcc cccggggcacg cggtacgagc tgtcgcgctg gcagccctgc
480
ggcccatgcc tggtaactg ctgtgggacc ttgg
514

```

<210> 496

<211> 171

<212> PRT

<213> Homo sapiens

<400> 496

```

Ala Arg Asp Thr Gly Ala Pro Ile Ser Val Pro Val Gly Asp Val Thr
  1           5           10           15
Lys Gly His Val Trp Asn Val Thr Gly Asp Val Leu Asn Ala Xaa Ser
      20           25           30
Leu His Asn Arg Gly Asp Xaa Glu Arg Trp Pro Ile His Arg Asp Pro
      35           40           45
Pro Ala Phe Asp Asp Leu Glu Pro Glu Thr Glu Met Leu Glu Thr Gly
      50           55           60
Ile Lys Val Leu Asp Leu Leu Thr Pro Tyr Val Lys Gly Gly Lys Ile
      65           70           75           80
Gly Leu Phe Gly Gly Ala Gly Val Gly Lys Thr Val Leu Ile Gln Glu

```



```

      35              40              45
Cys Leu His Ala Ser Cys His Thr Pro Ala Val Ile Pro Ala Arg Ala
  50              55              60
Pro Ser Ala Glu Ala Glu Leu Cys Ser Ala Gln Ala Trp Asp Leu Pro
  65              70              75              80
Arg Gln Ala Pro Val Gly Gly Ala Ala Pro Gly Lys Glu Ala Thr Ala
      85              90              95
Ser Leu Asn Ile Leu Arg Cys Lys Val Val Ala Pro Arg Gly Val Ser
      100              105              110
Val Lys Thr Gly Thr Arg Met Ala Gly Pro Ala Arg Leu Phe Pro His
      115              120              125
Leu Ser Ala Ser Glu Ala Ser Leu Glu Asp Ser Gly Pro Arg Met Ser
      130              135              140
Pro Arg Thr Ser Gln Ser Ala Ser Ser Ser Tyr Phe Cys Cys Ser Leu
      145              150              155              160
Gly Pro Asp Leu Ala Lys Val Ser Gln Arg Gly Gly Pro Arg Ser Glu
      165              170              175
Leu Ser Ser Cys Arg Gly Pro Arg Asp Gly Leu Gly Cys Lys Leu
      180              185              190

```

<210> 499

<211> 444

<212> DNA

<213> Homo sapiens

<400> 499

```

acgcgtgaag ggtgggcagt gttgagctga gtgagccctc ctccctgcaa tgcgtggagcc
  60
ctgccttctg cctgaccctc tggcttctca agcagctctat acgtgagaag ccctttcttc
  120
aagtgaagc ttctgagctc actacgagag cactggagct ggaacctctc tgggttcaaa
  180
tcctcaactg gggggttgga ggaggttact tcactttctca aaacctcaat ttccttatct
  240
gcaaaatggg gtaataggag cccctcttca tcaatgcttg gagggaaatgc ctggcacagt
  300
agggcagtta ccgtcatgga gaacagaaaag gccccgagct atcctggatg tggtgagaat
  360
gggtccctgga tcctgcctgc tcggcctttt cattctcttc ttcacctaca gggtccacca
  420
aagggcctct gaaaaacacag ggtg
  444

```

<210> 500

<211> 105

<212> PRT

<213> Homo sapiens

<400> 500

```

Met Thr Val Thr Ala Leu Leu Cys Gln Ala Phe Pro Pro Ser Ile Asp
  1              5              10              15
Glu Glu Gly Leu Leu Leu Pro His Phe Ala Asp Lys Glu Ile Glu Val
      20              25              30
Leu Arg Ser Glu Val Thr Ser Ser Asn Pro Pro Val Glu Asp Leu Asn

```

```

      35              40              45
Pro Glu Arg Phe Gln Leu Gln Cys Ser Arg Ser Glu Leu Arg Ser Phe
   50              55              60
His Leu Lys Lys Gly Leu Leu Thr Tyr Arg Leu Leu Arg Lys Pro Glu
   65              70              75              80
Gly Gln Ala Glu Gly Arg Ala Pro Ala Leu Gln Gly Gly Gly Leu Thr
      85              90              95
Gln Leu Asn Thr Ala His Pro Ser Arg
      100              105

```

<210> 501

<211> 800

<212> DNA

<213> Homo sapiens

<400> 501

```

agatctgac cgagaagtgg ctgctcaggg aaatgactac tccatggctt tcttaactca
60
ggatctcctt attcaatgag aggcctgagg tgagaccgc catgcggcgc gtggatcgca
120
tggtgttagt gcacactagc aaggggctta ggtctccagc tgaggtcaga tgcacacttg
180
gacctgttac tggggagtaa cacacatctc tgtgttcagc gaaccatcca ggagctgttt
240
gaagtttatt ctcccatgga tgatgctggc ttcccggtca aagctgagga gtttgtgggtg
300
ctttctcagg aaccttctgt caggaaacc attgcacca aaattgcaag acctttcata
360
gaggccctca agagtattga gtatctggag gaggatgccc agaagtccgc acaggagggg
420
gtgctgggac cacacactga tgctctgtca tcagactctg agaacatgcc gtgtgatgaa
480
gaaccatccc aattagagga gctagctgac ttcatggagc agcttacacc aattgaaaaa
540
tatgctttaa attacctgga atcttgaggc agggcctgag agagcacgct gcgccgtact
600
tccagcagct gcggcagacc acggctccac gcctgctgca gttccctgag ctgaggctgg
660
tgcagttcga ctcaggtatg cggcagttgg gggcggtggc cgtgcgggag ctgcactggc
720
cctggatgat gaggcgtctc tgatgtgatt cgtttccagc ggaagtggga agctttagct
780
atcttgcttc agaaaactgaa
800

```

<210> 502

<211> 103

<212> PRT

<213> Homo sapiens

<400> 502

```

Met Asp Asp Ala Gly Phe Pro Val Lys Ala Glu Glu Phe Val Val Leu
 1              5              10              15
Ser Gln Glu Pro Ser Val Thr Glu Thr Ile Ala Pro Lys Ile Ala Arg

```

```

                20                25                30
Pro Phe Ile Glu Ala Leu Lys Ser Ile Glu Tyr Leu Glu Asp Ala
      35                40                45
Gln Lys Ser Ala Gln Glu Gly Val Leu Gly Pro His Thr Asp Ala Leu
      50                55                60
Ser Ser Asp Ser Glu Asn Met Pro Cys Asp Glu Glu Pro Ser Gln Leu
      65                70                75                80
Glu Glu Leu Ala Asp Phe Met Glu Gln Leu Thr Pro Ile Glu Lys Tyr
      85                90                95
Ala Leu Asn Tyr Leu Glu Ser
      100

```

<210> 503

<211> 538

<212> DNA

<213> Homo sapiens

<400> 503

```

nnacgcgttg tcgtctctcc gatcattgat tttgttgat tctgcaatga tgtaaaggaa
60
gatgatgaca cggagaagtt taaagaagcc attgtgaaat ttcataggct gtttgggatg
120
ccagaggaag agaaactcgt caactattac tcttcagact attggaaggg gaaggtcccc
180
cgtcagggtt ggatgtacct cagcattaac cacctttgct tttattcttt tcttatggga
240
agggaaagcga aactgggtcat cgggtgggta gacatcactc agcttgagaa gaatgcccc
300
ctgcttctgc ctgatgtgat caaagtgagc acacgggtcca gtgagcattt cttctctgta
360
ttcctcaaca tcaacgagac cttcaagtta atggagcagc ttgccaacat agccatgagg
420
caactcttag acaatgaggg atttgaacaa gatcgatccc tgcccaaac caaaaggaaa
480
tctcctaaaa aagtgtctgc tctaaaacgt gatcttgatg cctgggccct tcacgcgt
538

```

<210> 504

<211> 179

<212> PRT

<213> Homo sapiens

<400> 504

```

Xaa Arg Val Val Ser Pro Ile Ile Asp Phe Val Val Phe Cys Asn
  1                5                10                15
Asp Val Lys Glu Asp Asp Asp Thr Glu Lys Phe Lys Glu Ala Ile Val
      20                25                30
Lys Phe His Arg Leu Phe Gly Met Pro Glu Glu Glu Lys Leu Val Asn
      35                40                45
Tyr Tyr Ser Cys Ser Tyr Trp Lys Gly Lys Val Pro Arg Gln Gly Trp
      50                55                60
Met Tyr Leu Ser Ile Asn His Leu Cys Phe Tyr Ser Phe Leu Met Gly
      65                70                75                80
Arg Glu Ala Lys Leu Val Ile Arg Trp Val Asp Ile Thr Gln Leu Glu

```

```

      85                      90                      95
Lys Asn Ala Pro Leu Leu Leu Pro Asp Val Ile Lys Val Ser Thr Arg
      100                      105                      110
Ser Ser Glu His Phe Phe Ser Val Phe Leu Asn Ile Asn Glu Thr Phe
      115                      120                      125
Lys Leu Met Glu Gln Leu Ala Asn Ile Ala Met Arg Gln Leu Leu Asp
      130                      135                      140
Asn Glu Gly Phe Glu Gln Asp Arg Ser Leu Pro Lys Leu Lys Arg Lys
      145                      150                      155                      160
Ser Pro Lys Lys Val Ser Ala Leu Lys Arg Asp Leu Asp Ala Trp Ala
      165                      170                      175
Leu His Ala

```

<210> 505

<211> 381

<212> DNA

<213> Homo sapiens

<400> 505

```

gtgcacgaca ccgaacggta cgaacgtatc tcccaggcac gtcgcgagga acagcaggcc
60
atgctcgggt acgacngctc aagaacctgt cgcatacact tgctcaccgg gcagctggag
120
gaccctccca cgactccttg cggacgctgc gacgtctgtg ctggcccggt gtactcagtc
180
gaggtcgatc agtcagccgc tgtgagagcc gtccaatccc tcaaccgggt gggagttccg
240
gtggaaccac gcgcccctg gcccgagggt atggacgccc tccaggttgc gctcaagggt
300
cgcatacagt ccgaggagat cgctgcagag ggccgcgcta tcgccagact ctccgattcg
360
ggttggggag gggcgctgctg c
381

```

<210> 506

<211> 127

<212> PRT

<213> Homo sapiens

<400> 506

```

Val His Asp Thr Glu Arg Tyr Glu Arg Ile Ser Gln Ala Arg Arg Glu
1      5      10
Glu Gln Gln Ala Met Leu Gly Tyr Asp Xaa Ser Arg Thr Cys Arg Met
20     25     30
Thr Leu Leu Thr Gly Gln Leu Asp Asp Pro Ser Thr Thr Pro Cys Gly
35     40     45
Arg Cys Asp Val Cys Ala Gly Pro Trp Tyr Ser Val Glu Val Asp Gln
50     55     60
Ser Ala Ala Val Arg Ala Val Gln Ser Leu Asn Arg Val Gly Val Pro
65     70     75     80
Val Glu Pro Arg Ala Ala Trp Pro Ala Gly Met Asp Ala Leu Gln Val
85     90     95
Ala Leu Lys Gly Arg Ile Ser Ala Glu Glu Ile Ala Ala Glu Gly Arg

```

	100		105		110
Val	Ile	Ala	Arg	Leu	Ser
		Asp	Leu	Gly	Trp
			Gly	Gly	Ala
				Leu	Arg
	115		120		125

<210> 507

<211> 499

<212> DNA

<213> Homo sapiens

<400> 507

```

gccggcggtgt tcaacctcat ggtgtggggc ttcattaccg acgtcatcga tgcccaggag
60
gtcatgtccg gggagcgtga agacggtgtc atctatggcg tgaactcctt cgcccgc aaa
120
cttgcccagg ccattgccgg tggaatcgcc ggagccatgc tgacgatgat cggctaccag
180
tctctctccc aagtggtgtc cgttcagtcg gagtccgtcg tcaatcacct gtacacgctc
240
gccaccgccca tcccgaacgat ctgctgcctc ggcgctgccc tgctcatgct gggctaccgg
300
ctcaccgcgc acaagggtgt gcaccaacgcc gacgagttgg ctcgtcgcca cgcagtacag
360
gccgagcaaa actcctgacc cataacggag gcacatcatg gacacgctca tgcggatcac
420
cgaccacttg acaacctcgc cgggtatcca attgaaaatt gacaagcgat ggggtgcctc
480
cgtcacattt gtgacgcgt
499

```

<210> 508

<211> 125

<212> PRT

<213> Homo sapiens

<400> 508

Ala	Gly	Val	Phe	Asn	Leu	Met	Val	Trp	Ala	Phe	Ile	Thr	Asp	Val	Ile
1			5					10					15		
Asp	Ala	Gln	Glu	Val	Met	Ser	Gly	Glu	Arg	Glu	Asp	Gly	Val	Ile	Tyr
		20					25				30				
Gly	Val	Asn	Ser	Phe	Ala	Arg	Lys	Leu	Ala	Gln	Ala	Ile	Ala	Gly	Gly
		35				40				45					
Ile	Gly	Gly	Ala	Met	Leu	Thr	Met	Ile	Gly	Tyr	Gln	Ser	Ser	Ser	Gln
	50				55				60						
Gly	Gly	Ala	Val	Gln	Ser	Glu	Ser	Val	Val	Asn	His	Leu	Tyr	Thr	Leu
65				70				75				80			
Ala	Thr	Ala	Ile	Pro	Thr	Ile	Cys	Cys	Leu	Gly	Ala	Ala	Leu	Leu	Met
		85						90				95			
Leu	Gly	Tyr	Pro	Leu	Thr	Arg	Asp	Lys	Val	Val	Ala	Asn	Ala	Asp	Glu
		100				105					110				
Leu	Ala	Arg	Arg	His	Ala	Val	Gln	Ala	Glu	Gln	Asn	Ser			
	115					120					125				

<210> 509

<211> 360

<212> DNA

<213> Homo sapiens

<400> 509

ttggccatgg atttggtctcg caagttcagt cccaaagatg tcacgctcta tctaattggac
 60
 ttccgggacca atgggtgtggc accactaggc caattaccac aggtggcgga caccttgctt
 120
 ttggatcata cggagaagat tgccaagttt gtacgcatca tggagcggga gctcaaccgg
 180
 cgtaagaagc tcttgtccga ctacgggtgtt ggtacactag agctctaccg tcaggcttagc
 240
 ggtcagcaag agccggccat cgtcatcctg ctggacagtt atgagtcctat gaaggaagag
 300
 gcctatgaag cggagctctt cagcgtcttg gtgcggatct cccgggaagg tctcagcatc
 360

<210> 510

<211> 120

<212> PRT

<213> Homo sapiens

<400> 510

Leu	Ala	Met	Asp	Leu	Ala	Arg	Lys	Phe	Ser	Pro	Lys	Asp	Val	Thr	Leu
1				5					10				15		
Tyr	Leu	Met	Asp	Phe	Gly	Thr	Asn	Gly	Val	Ala	Pro	Leu	Gly	Gln	Leu
			20					25					30		
Pro	Gln	Val	Ala	Asp	Thr	Leu	Leu	Leu	Asp	His	Thr	Glu	Lys	Ile	Ala
		35					40					45			
Lys	Phe	Val	Arg	Ile	Met	Glu	Arg	Glu	Leu	Asn	Arg	Arg	Lys	Lys	Leu
	50					55				60					
Leu	Ser	Asp	Tyr	Gly	Val	Gly	Thr	Leu	Glu	Leu	Tyr	Arg	Gln	Ala	Ser
65					70				75				80		
Gly	Gln	Gln	Glu	Pro	Ala	Ile	Val	Ile	Leu	Leu	Asp	Ser	Tyr	Glu	Ser
			85					90					95		
Met	Lys	Glu	Glu	Ala	Tyr	Glu	Ala	Glu	Leu	Phe	Thr	Leu	Leu	Val	Arg
			100					105					110		
Ile	Ser	Arg	Glu	Gly	Leu	Ser	Ile								
			115				120								

<210> 511

<211> 361

<212> DNA

<213> Homo sapiens

<400> 511

ntccgcaacc gcggctatgc ggtgctccag cccaatttcc gcggatcggg cggttatggc
 60
 actcggttcg gcgatgccgg catcgccagc atcgggcgca agatgcagga cgatctcgac
 120
 gacgggatgg actggctggt caaggagggc atcgtcgaca agggccgggt gtgcacgtc
 180
 ggggcctcct atggcggcta tgccgcgatg tggggcgcca tccgcaatcc cgaacgctat
 240

cgctgcgcgg cgagcctggc ggggggttgcc gattaaggcc atgctcaaat ataaccggcg
 300
 ctatctcgac aaggaggcgg gcaagcgctg gccgccccgn tcaaccggcg aacccgaatt
 360
 c
 361

<210> 512
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 512
 Xaa Ala Asn Arg Gly Tyr Ala Val Leu Gln Pro Asn Phe Arg Gly Ser
 1 5 10 15
 Gly Gly Tyr Gly Thr Ala Phe Gly Asp Ala Gly Ile Gly Gln Ile Gly
 20 25 30
 Arg Lys Met Gln Asp Asp Leu Asp Asp Gly Met Asp Trp Leu Val Lys
 35 40 45
 Glu Gly Ile Val Asp Lys Gly Arg Val Cys Ile Val Gly Ala Ser Tyr
 50 55 60
 Gly Gly Tyr Ala Ala Met Trp Gly Ala Ile Arg Asn Pro Glu Arg Tyr
 65 70 75 80
 Arg Cys Ala Ala Ser Leu Ala Gly Val Ala Asp
 85 90

<210> 513
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 513
 nnatgcagac tagaagatgg catgacgggt ttggctggcg gtttcgggct atgcggcatt
 60
 ccagaaaatc tgattcaaga gatcaaacga cgccagactt gtgatttgac catagtgtca
 120
 aataactgtg gtgtagatgg ttttggttta ggggttttgc tagaagataa gcaagtacgc
 180
 aaaatgggtgt cttcttatgt ggggtaaaaat gcactgtttt agaagcaatt attacaaggt
 240
 gagttggaag tcgagctcac tcctcaaggc actcttggcg aaaaactacg cgctggcgccg
 300
 gcgggaattc ctgccttttt cacagcaacg ggtgtaggtta cacctattgg tgagggtaaa
 360
 gacacgcgt
 369

<210> 514
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 514
 Xaa Cys Arg Leu Glu Asp Gly Met Thr Val Leu Ala Gly Gly Phe Gly


```

      1             5             10             15
Leu Cys Gly Ile Pro Glu Asn Leu Ile Gln Glu Ile Lys Arg Arg Gln
      20             25             30
Thr Cys Asp Leu Thr Ile Val Ser Asn Asn Cys Gly Val Asp Gly Phe
      35             40             45
Gly Leu Gly Val Leu Leu Glu Asp Lys Gln Val Arg Lys Met Val Ser
      50             55             60
Ser Tyr Val Gly Glu Asn Ala Leu Phe Glu Lys Gln Leu Leu Gln Gly
      65             70             75             80
Glu Leu Glu Val Glu Leu Thr Pro Gln Gly Thr Leu Ala Glu Lys Leu
      85             90             95
Arg Ala Gly Gly Ala Gly Ile Pro Ala Phe Phe Thr Ala Thr Gly Val
      100             105             110
Gly Thr Pro Ile Gly Glu Gly Lys Asp Thr Arg
      115             120

```

<210> 515

<211> 387

<212> DNA

<213> Homo sapiens

<400> 515

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tccgacgtgc aggactcgtc gctgaccgcg atggacgagc tgatcaccga gggcgtagaca
120
tccttcaagc tcttcgtggc ctacaagggc gtcttctctc cggacgacgg gcagatcctg
180
cgggcggttcc agaagggcgc cgacaacggc gcgatgatga tgatgcacgc cgagaacggc
240
gcgatcatcg acgtgctcgt gcagcaggcg ctcgaggccg ggaagaccac cccgtactac
300
cacggcatca gccggccgtg gcaggccgag gaggaggcca cccaccgcgc gatcatgac
360
gccgacctga cgggtgcgcc gttgtac
387

```

<210> 516

<211> 129

<212> PRT

<213> Homo sapiens

<400> 516

```

Ala Trp Asp Glu Lys Ala Ala Gly Asn Cys Ala Ile Asp Tyr Gly Phe
      1             5             10             15
His Gln Ile Leu Ser Asp Val Gln Asp Ser Ser Leu Thr Ala Met Asp
      20             25             30
Glu Leu Ile Thr Glu Gly Val Thr Ser Phe Lys Leu Phe Val Ala Tyr
      35             40             45
Lys Gly Val Phe Leu Ser Asp Asp Gly Gln Ile Leu Arg Ala Phe Gln
      50             55             60
Lys Gly Ala Asp Asn Gly Ala Met Met Met His Ala Glu Asn Gly
      65             70             75             80
Ala Ile Ile Asp Val Leu Val Gln Gln Ala Leu Glu Ala Gly Lys Thr

```

```

      85              90              95
Thr Pro Tyr Tyr His Gly Ile Ser Arg Pro Trp Gln Ala Glu Glu
      100              105              110
Ala Thr His Arg Ala Ile Met Ile Ala Asp Leu Thr Gly Ala Pro Leu
      115              120              125
Tyr

```

```

<210> 517
<211> 377
<212> DNA
<213> Homo sapiens

```

```

<400> 517
acgcgtgaag ggctggtggg caggccttgc gccccctctg gggacagctc tcctccaccc
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agaccccttc gggccaacag tggggagggg ctgccgtctg agccactgtt ccgacagggg
120
attcgcgagt tccgggggag ctgggggactg agctgcgggc ctctctgggt ggggctcttc
180
tccgaggttg gaggcagctt tagaaacttg agacccttag ctggagaggg cagaaggggt
240
ccctgagctt cccaggaga aggggggcca atttgagct tgcttttcac ctgagatgag
300
gaatgggggt ggccaggccg agagccctag ggggcatccc cagcaccat gaacatgcta
360
aggaagggga ggggccc
377

```

```

<210> 518
<211> 118
<212> PRT
<213> Homo sapiens

```

```

<400> 518
Met Phe Met Gly Ala Gly Asp Ala Pro Leu Gly Ser Arg Pro Gly His
1      5      10      15
Pro His Ser Ser Ser Gln Val Lys Ser Lys Leu Gln Ile Gly Pro Pro
20      25      30
Ser Pro Gly Glu Ala Gln Gly Pro Leu Leu Pro Ser Pro Ala Arg Gly
35      40      45
Leu Lys Phe Leu Lys Leu Pro Pro Thr Ser Glu Lys Ser Pro Ser Pro
50      55      60
Gly Gly Pro Gln Leu Ser Pro Gln Leu Pro Arg Asn Ser Arg Ile Pro
65      70      75      80
Cys Arg Asn Ser Gly Ser Asp Gly Ser Pro Ser Pro Leu Leu Ala Arg
85      90      95
Arg Gly Leu Gly Gly Gly Glu Leu Ser Pro Glu Gly Ala Gln Gly Leu
100      105      110
Pro Thr Ser Pro Ser Arg
115

```

```

<210> 519
<211> 311

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<212> DNA

<213> Homo sapiens

<400> 519

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 120
 aagaaattga taattttcta ggaaacatg acttaccaaa attaactcta gaaaagaatc
 180
 gatacacatc agtaacaaca gaagttgaga aagtagttaa catattgcc aacctggaat
 240
 tcatgattga attctttgag atctactgtg agtacatact ctgcctctgt tcagctgttc
 300
 cagaacttaa g
 311

<210> 520

<211> 92

<212> PRT

<213> Homo sapiens

<400> 520

Met	Arg	Gly	Lys	Tyr	Gln	Ile	Leu	Lys	Asn	Leu	Asn	Tyr	Tyr	Lys	Gly
1				5					10					15	
Thr	Phe	Ser	Ala	Thr	Leu	Lys	Asn	Val	Arg	Ile	Ser	Lys	Glu	Ile	Asp
			20					25					30		
Asn	Phe	Leu	Gly	Lys	His	Asp	Leu	Pro	Lys	Leu	Thr	Leu	Glu	Lys	Asn
			35				40					45			
Arg	Tyr	Thr	Ser	Val	Thr	Thr	Glu	Val	Glu	Lys	Val	Val	Asn	Ile	Leu
	50					55					60				
Pro	Asn	Leu	Glu	Phe	Met	Ile	Glu	Phe	Phe	Glu	Ile	Tyr	Cys	Glu	Tyr
65					70					75				80	
Ile	Leu	Cys	Leu	Cys	Ser	Ala	Val	Pro	Glu	Leu	Lys				
			85						90						

<210> 521

<211> 352

<212> DNA

<213> Homo sapiens

<400> 521

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 attcagaag agatgcgcgc gcagctgcag ctgtcccttg tgcgtccca cgcggccggc
 120
 accggccctg aggtggaaga agaagtaatt cgcgcgctca tgctgtctgc cctatccacc
 180
 ctgtgtaccg gccgtaccgg cgtgcgcccc gtgggtggtag aaacttatgc caaggcgctc
 240
 aacgccggca tcgtgccggg ggtgcgcgaa tacgggtcgc tgggctgctc cggcgacttg
 300
 gccccgctgg ctcaactgcgc cctagcgctg ttgggtgagg gtgaggtacg cn
 352

<210> 522

<211> 117

<212> PRT

<213> Homo sapiens

<400> 522

```

Xaa Asp Ala Thr Pro Val Tyr Gly Ile Ser Thr Gly Phe Gly Ala Leu
 1             5             10             15
Ala Arg Arg His Ile Pro Glu Glu Met Arg Ala Gln Leu Gln Leu Ser
      20             25             30
Leu Val Arg Ser His Ala Ala Gly Thr Gly Pro Glu Val Glu Glu Glu
 35             40             45
Val Ile Arg Ala Leu Met Leu Leu Arg Leu Ser Thr Leu Cys Thr Gly
 50             55             60
Arg Thr Gly Val Arg Pro Val Val Val Glu Thr Tyr Ala Lys Ala Leu
65             70             75             80
Asn Ala Gly Ile Val Pro Gly Val Arg Glu Tyr Gly Ser Leu Gly Cys
      85             90             95
Ser Gly Asp Leu Ala Pro Leu Ala His Cys Ala Leu Ala Leu Leu Gly
100             105             110
Glu Gly Glu Val Arg
      115

```

<210> 523

<211> 693

<212> DNA

<213> Homo sapiens

<400> 523

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tcagagccac caagctgcgg caccatctaa ggagaacatg tcccctggag gtctctgtag
120
aagctcctgg ttgagaaggc cctgaagctg ggtggcatca atgtccagcc tctgctgagc
180
atatctgttg aaaatgcttt gttgggagcc atgttctgaa gggcttccct tcattctgag
240
gttgaaatgg ctgctcaggt gcctgtcact gtctggcatt ttcaggaaga ttcggagcaa
300
gaactccgct gattttcttc gtgtctgtgc aaccacaaca tagttcccag ggctcagatg
360
gtaagtcgat gtgaagttgc ggcggaattt attattttag ctttgagacag tgtttctgaa
420
cgaggaaaaa aacacgggtg gaaattttct ccggaaccgc tgtgagccag ccagaatcac
480
ttggaaatcg agtggaat ttgcatcttc tgetttcaaa tttgatgggtg tgacagcaac
540
tgtgacgcac acgacaacat tgggtgccttc cattggctct tgcacagaga agttgaattg
600
agcatcattt ccgggtcctc ctggcggtgt tcctagaatc attgcttctt aaacattatt
660
tgggaccatc cttcgtggag tgtgtttcca tgg
693

```

<210> 524
 <211> 193
 <212> PRT
 <213> Homo sapiens

<400> 524

```

Met Ile Leu Gly Asn Thr Pro Gly Gly Pro Gly Asn Asp Ala Gln Phe
 1             5             10             15
Asn Phe Ser Val Gln Glu Pro Met Glu Gly Thr Asn Val Val Val Cys
      20             25             30
Val Thr Val Ala Val Thr Pro Ser Asn Leu Lys Ala Glu Asp Ala Lys
      35             40             45
Phe Pro Leu Asp Phe Gln Val Ile Leu Ala Gly Ser Gln Arg Phe Arg
 50             55             60
Glu Lys Phe Pro Pro Val Phe Phe Ser Ser Phe Arg Asn Thr Val Gln
65             70             75             80
Ser Ser Asn Asn Lys Phe Arg Arg Asn Phe Thr Met Thr Tyr His Leu
      85             90             95
Ser Pro Gly Asn Tyr Val Val Val Ala Gln Thr Arg Arg Lys Ser Ala
      100            105            110
Glu Phe Leu Leu Arg Ile Phe Leu Lys Met Pro Asp Ser Asp Arg His
      115            120            125
Leu Ser Ser His Phe Asn Leu Arg Met Lys Gly Ser Pro Ser Glu His
      130            135            140
Gly Ser Gln Gln Ser Ile Phe Asn Arg Tyr Ala Gln Gln Arg Leu Asp
145            150            155            160
Ile Asp Ala Thr Gln Leu Gln Gly Leu Leu Asn Gln Glu Leu Leu Thr
      165            170            175
Gly Pro Pro Gly Asp Met Phe Ser Leu Asp Gly Ala Ala Ala Trp Trp
      180            185            190
Leu

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<210> 525
 <211> 1101
 <212> DNA
 <213> Homo sapiens

<400> 525

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120
gtcctaccga gaccgatccg cagcgttttg cccggtcgcg cctattgcat cgggagcccc
180
cgagcaccgg cgaaggactg gcgggtgggg tagggaggtg gcggcgccgg catggcgagg
240
ttcccgaaag ccgacctggc cgctgcagga gttatgttac ttgccactt cttcacggac
300
cagtttcagt tcgccgatgg gaaaccggga gaccaaacc ttgattggca gtatggagtt
360
actcaggcct tccctcacac agaggaggag gtggaagtgt attcacacgc gtacagccac
420

```

```

aggtggaaaa gaaacttggg ctttctcaag gcggtagaca cgaaccgagc aagcgtcggc
480
caagactctc ttgagcccag aagcttcaca gacctgctgc tggatgatgg gcaggacaa
540
aacactcaga tcgaggaggga tacagaccac aattactata tatctcgaat atatgggtcca
600
tctgattctg ccagccggga tttatgggtg aacatagacc aaatggaaaa agataaagt
660
aagattcatg gaattattgtc caatactcat cggcaagctg caagagttaa tctgtccttc
720
gattttccat tttatggcca ctctctactg gaaatcactg tggcaaccgg gggtttcata
780
tacactggag aagtcgtaca tcgaatgcta acagccacac agtacatagc acctttaatg
840
gcaaatttcg atcccagtg atccagaaat tcaactgtca gatattttga taatggcaca
900
gcacttggtg tccagtggga ccatgtacat ctccaggata attataacct gggaagcttc
960
acattccagg caaccctgct catggatgga cgaatcatct ttggatacaa agaaattcct
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1080
tttgtcgttg tccacaggat c
1101

```

<210> 526

<211> 290

<212> PRT

<213> Homo sapiens

<400> 526

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Met Ala Arg Phe Pro Lys Ala Asp Leu Ala Ala Gly Val Met Leu
1          5          10          15
Leu Cys His Phe Thr Asp Gln Phe Gln Phe Ala Asp Gly Lys Pro
20          25          30
Gly Asp Gln Ile Leu Asp Trp Gln Tyr Gly Val Thr Gln Ala Phe Pro
35          40          45
His Thr Glu Glu Glu Val Glu Val Asp Ser His Ala Tyr Ser His Arg
50          55          60
Trp Lys Arg Asn Leu Asp Phe Leu Lys Ala Val Asp Thr Asn Arg Ala
65          70          75          80
Ser Val Gly Gln Asp Ser Leu Glu Pro Arg Ser Phe Thr Asp Leu Leu
85          90          95
Leu Asp Asp Gly Gln Asp Asn Asn Thr Gln Ile Glu Glu Asp Thr Asp
100         105         110
His Asn Tyr Tyr Ile Ser Arg Ile Tyr Gly Pro Ser Asp Ser Ala Ser
115         120         125
Arg Asp Leu Trp Val Asn Ile Asp Gln Met Glu Lys Asp Lys Val Lys
130         135         140
Ile His Gly Ile Leu Ser Asn Thr His Arg Gln Ala Ala Arg Val Asn
145         150         155         160
Leu Ser Phe Asp Phe Pro Phe Tyr Gly His Phe Leu Arg Glu Ile Thr
165         170         175
Val Ala Thr Gly Gly Phe Ile Tyr Thr Gly Glu Val Val His Arg Met

```

```

      180              185              190
Leu Thr Ala Thr Gln Tyr Ile Ala Pro Leu Met Ala Asn Phe Asp Pro
      195              200              205
Ser Val Ser Arg Asn Ser Thr Val Arg Tyr Phe Asp Asn Gly Thr Ala
      210              215              220
Leu Val Val Gln Trp Asp His Val His Leu Gln Asp Asn Tyr Asn Leu
      225              230              235
Gly Ser Phe Thr Phe Gln Ala Thr Leu Leu Met Asp Gly Arg Ile Ile
      240              245              250              255
Phe Gly Tyr Lys Glu Ile Pro Val Leu Val Thr Gln Ile Ser Ser Thr
      260              265              270
Asn His Pro Val Lys Val Gly Leu Ser Asp Ala Phe Val Val Val His
      275              280              285
Arg Ile
      290

```

<210> 527

<211> 5343

<212> DNA

<213> Homo sapiens

<400> 527

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120
gcctcccgag agctagacat cctctcctct gaggacagtg agacggctta cgactgggag
180
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420
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660
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720
aagtgttctg tcagttgttg tgttgaate cagagaagaa agcaggtgtg tcaaaggctg
780
gcagccaaaag gtcggcgcat cccctcctg gagatgatgt gcagggatct accagggtct
840
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900
aaacttggtg agcagggtcc gcagatcctc agtgtccaga gagtctacat tcagacaagg
960

```

gaagagaagc gtattaacct gaccattggt agcagagcct atttgetgcc caacacatcc
1020
gtgattatta agtgccccgt gcgacgattc cagaaatctc tgatccagtg ggagaaggat
1080
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4200

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 4380
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 4560
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<210> 528

<211> 886

<212> PRT

<213> Homo sapiens

<400> 528

Xaa Cys Arg Val Leu Leu Thr Phe Thr Gln Thr Glu Thr Glu Leu Pro
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 Glu Glu Glu Cys Glu Gly Pro Lys Leu Pro Thr Glu Arg Pro Cys Phe
 20 25 30
 Leu Glu Ala Cys Asp Glu Ser Pro Ala Ser Arg Glu Leu Asp Ile Pro
 35 40 45
 Leu Pro Glu Asp Ser Glu Thr Ala Tyr Asp Trp Glu Tyr Ala Gly Phe

50		55		60
Thr Pro Cys Thr Ala	Thr Cys Leu Gly Gly His	Gln Glu Ala Ile Ala		
65	70	75	80	
Val Cys Leu His Ile	Gln Thr Gln Gln Thr Val	Asn Asp Ser Leu Cys		
	85	90	95	
Asp Met Val His Arg	Pro Pro Ala Met Ser	Gln Ala Cys Asn Thr Glu		
	100	105	110	
Pro Cys Pro Pro Arg	Trp His Val Gly Ser	Trp Gly Pro Cys Ser Ala		
	115	120	125	
Thr Cys Gly Val Gly	Ile Gln Thr Arg Asp	Val Tyr Cys Leu His Pro		
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Gly Glu Thr Pro Ala	Pro Pro Glu Glu Cys Arg	Asp Glu Lys Pro His		
	145	150	155	
Ala Leu Gln Ala Cys	Asn Gln Phe Asp Cys	Pro Pro Gly Trp His Ile		
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Glu Glu Trp Gln Gln	Cys Ser Arg Thr Cys Gly	Gly Gly Thr Gln Asn		
	180	185	190	
Arg Arg Val Thr Cys	Arg Gln Leu Thr Asp	Gly Ser Phe Leu Asn		
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Leu Ser Asp Glu Leu	Cys Gln Gly Pro Lys Ala	Ser Ser His Lys Ser		
	210	215	220	
Cys Ala Arg Thr Asp	Cys Pro Pro His Leu Ala	Val Gly Asp Trp Ser		
	225	230	235	
Lys Cys Ser Val Ser	Cys Gly Val Gly Ile Gln	Arg Arg Lys Gln Val		
	245	250	255	
Cys Gln Arg Leu Ala	Ala Lys Gly Arg Ile Pro	Leu Ser Glu Met		
	260	265	270	
Met Cys Arg Asp Leu	Pro Gly Leu Pro Leu Val	Arg Ser Cys Gln Met		
	275	280	285	
Pro Glu Cys Ser Lys	Ile Lys Ser Glu Met Lys	Thr Lys Leu Gly Glu		
	290	295	300	
Gln Gly Pro Gln Ile	Leu Ser Val Gln Arg Val	Tyr Ile Gln Thr Arg		
	305	310	315	
Glu Glu Lys Arg Ile	Asn Leu Thr Ile Gly Ser	Arg Ala Tyr Leu Leu		
	325	330	335	
Pro Asn Thr Ser Val	Ile Ile Lys Cys Pro Val	Arg Arg Phe Gln Lys		
	340	345	350	
Ser Leu Ile Gln Trp	Glu Lys Asp Gly Arg Cys	Leu Gln Asn Ser Lys		
	355	360	365	
Arg Leu Gly Ile Thr	Lys Ser Gly Ser Leu Lys	Ile His Gly Leu Ala		
	370	375	380	
Ala Pro Asp Ile Gly	Val Tyr Arg Cys Ile Ala	Gly Ser Ala Gln Glu		
	385	390	395	
Thr Val Val Leu Lys	Leu Ile Gly Thr Asp	Asn Arg Leu Ile Ala Arg		
	405	410	415	
Pro Ala Leu Arg Glu	Pro Met Arg Glu Tyr	Pro Gly Met Asp His Ser		
	420	425	430	
Glu Ala Asn Ser Leu	Gly Val Thr Trp His Lys	Met Arg Gln Met Trp		
	435	440	445	
Asn Asn Lys Asn Asp	Leu Tyr Leu Asp Asp	Asp His Ile Ser Asn Gln		
	450	455	460	
Pro Phe Leu Arg Ala	Leu Leu Gly His Cys	Ser Asn Ser Ala Gly Ser		
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<210> 529

<211> 4566

<212> DNA

<213> Homo sapiens

<400> 529

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<210> 530

<211> 802

<212> PRT

<213> Homo sapiens

<400> 530

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Glu Leu Lys Arg Ala Gly Pro Arg Arg Arg Ala Ser Pro Glu Gly Cys
          35           40           45
Arg Ser Gly Gln Ala Ala Ala Ser Gln Ala Gly Gly Ala Arg Gly Asp
          50           55           60
Ala Arg Gly Ala Gln Leu Trp Pro Pro Gly Ser Asp Pro Asp Gly Gly
65           70           75           80
Pro Arg Asp Arg Asn Phe Leu Phe Val Gly Val Met Thr Ala Gln Lys
          85           90           95
Tyr Leu Gln Thr Arg Ala Val Ala Ala Tyr Arg Thr Trp Ser Lys Thr
          100          105          110
Ile Pro Gly Lys Val Gln Phe Phe Ser Ser Glu Gly Ser Asp Thr Ser
          115          120          125
Val Pro Ile Pro Val Val Pro Leu Arg Gly Val Asp Asp Ser Tyr Pro
          130          135          140
Pro Gln Lys Lys Ser Phe Met Met Leu Lys Tyr Met His Asp His Tyr
145          150          155          160
Leu Asp Lys Tyr Glu Trp Phe Met Arg Ala Asp Asp Val Tyr Ile
          165          170          175
Lys Gly Asp Arg Leu Glu Asn Phe Leu Arg Ser Leu Asn Ser Ser Glu
          180          185          190
Pro Leu Phe Leu Gly Gln Thr Gly Leu Gly Thr Thr Glu Glu Met Gly
          195          200          205
Lys Leu Ala Leu Glu Pro Gly Glu Asn Phe Cys Met Gly Gly Pro Gly
210          215          220
Val Ile Met Ser Arg Glu Val Leu Arg Arg Met Val Pro His Ile Gly
225          230          235          240
Lys Cys Leu Arg Glu Met Tyr Thr Thr His Glu Asp Val Glu Val Gly
          245          250          255
Arg Cys Val Arg Arg Phe Ala Gly Val Gln Cys Val Trp Ser Tyr Glu
          260          265          270
Met Gln Gln Leu Phe Tyr Glu Asn Tyr Glu Gln Asn Lys Lys Gly Tyr
          275          280          285
Ile Arg Asp Leu His Asn Ser Lys Ile His Gln Ala Ile Thr Leu His
          290          295          300
Pro Asn Lys Asn Pro Pro Tyr Gln Tyr Arg Leu His Ser Tyr Met Leu
305          310          315          320
Ser Arg Lys Ile Ser Glu Leu Arg His Arg Thr Ile Gln Leu His Arg
          325          330          335
Glu Ile Val Leu Met Ser Lys Tyr Ser Asn Thr Glu Ile His Lys Glu
          340          345          350
Asp Leu Gln Leu Gly Ile Pro Pro Ser Phe Met Arg Phe Gln Pro Arg
          355          360          365
Gln Arg Glu Glu Ile Leu Glu Trp Glu Phe Leu Thr Gly Lys Tyr Leu
          370          375          380
Tyr Ser Ala Val Asp Gly Gln Pro Pro Arg Arg Gly Met Asp Ser Ala
385          390          395          400
Gln Arg Glu Ala Leu Asp Asp Ile Val Met Gln Val Met Glu Met Ile

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Asn Ala Asn Ala Lys Thr Arg Gly Arg Ile Ile Asp Phe Lys Glu Ile
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Gln Tyr Gly Tyr Arg Arg Val Asn Pro Met Tyr Gly Ala Glu Tyr Ile
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Leu Asp Leu Leu Leu Leu Tyr Lys Lys His Lys Gly Lys Lys Met Thr
          450                      455                      460
Val Pro Val Arg Arg His Ala Tyr Leu Gln Gln Thr Phe Ser Lys Ile
          465                      470                      475
Gln Phe Val Glu His Glu Glu Leu Asp Ala Gln Glu Leu Ala Lys Arg
          485                      490                      495
Ile Asn Gln Glu Ser Gly Ser Leu Ser Phe Leu Ser Asn Ser Leu Lys
          500                      505                      510
Lys Leu Val Pro Phe Gln Leu Pro Gly Ser Lys Ser Glu His Lys Glu
          515                      520                      525
Pro Lys Asp Lys Lys Ile Asn Ile Leu Ile Pro Leu Ser Gly Arg Phe
          530                      535                      540
Asp Met Phe Val Arg Phe Met Gly Asn Phe Glu Lys Thr Cys Leu Ile
          545                      550                      555
Pro Asn Gln Asn Val Lys Leu Val Val Leu Leu Phe Asn Ser Asp Ser
          565                      570                      575
Asn Pro Asp Lys Ala Lys Gln Val Glu Leu Met Thr Asp Tyr Arg Ile
          580                      585                      590
Lys Tyr Pro Lys Ala Asp Met Gln Ile Leu Pro Val Ser Gly Glu Phe
          595                      600                      605
Ser Arg Ala Leu Ala Leu Glu Val Gly Ser Ser Gln Phe Asn Asn Glu
          610                      615                      620
Ser Leu Leu Phe Phe Cys Asp Val Asp Leu Val Phe Thr Thr Glu Phe
          625                      630                      635
Leu Gln Arg Cys Arg Ala Asn Thr Val Leu Gly Gln Gln Ile Tyr Phe
          645                      650                      655
Pro Ile Ile Phe Ser Gln Tyr Asp Pro Lys Ile Val Tyr Ser Gly Lys
          660                      665                      670
Val Pro Ser Asp Asn His Phe Ala Phe Thr Gln Lys Thr Gly Phe Trp
          675                      680                      685
Arg Asn Tyr Gly Phe Gly Ile Thr Cys Ile Tyr Lys Gly Asp Leu Val
          690                      695                      700
Arg Val Gly Gly Phe Asp Val Ser Ile Gln Gly Trp Gly Leu Glu Asp
          705                      710                      715
Val Asp Leu Phe Asn Lys Val Val Gln Ala Gly Leu Lys Thr Phe Arg
          725                      730                      735
Ser Gln Glu Val Gly Val Val His Val His His Pro Val Phe Cys Asp
          740                      745                      750
Pro Asn Leu Asp Pro Lys Gln Tyr Lys Met Cys Leu Gly Ser Lys Ala
          755                      760                      765
Ser Thr Tyr Gly Ser Thr Gln Gln Leu Ala Glu Met Trp Leu Glu Lys
          770                      775                      780
Asn Asp Pro Ser Tyr Ser Lys Ser Ser Asn Asn Asn Gly Ser Val Arg
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Thr Ala
          800

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<210> 531

<211> 321

<212> DNA

<213> Homo sapiens

<400> 531

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 120
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 180
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<210> 532

<211> 96

<212> PRT

<213> Homo sapiens

<400> 532

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Lys	Gly	Leu	Leu	Phe	Arg	Asn	Asn	Lys	Gly	Leu	Glu	Leu	Arg	Gly	Arg
			20					25					30		
Ser	Val	Lys	Arg	Cys	Arg	Thr	Ser	Val	Ser	Asn	Ala	Pro	Glu	Val	Asn
			35				40						45		
Pro	Arg	Gly	Arg	Leu	Asn	Gln	Ala	Ser	Trp	Ala	Trp	Asp	Asp	Ser	Gly
			50			55					60				
Cys	Ser	Gly	Ser	Asn	Gly	Ala	Cys	Gly	Ser	Ala	Leu	Ile	Asp	Ser	Arg
					70				75				80		
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<210> 533

<211> 335

<212> DNA

<213> Homo sapiens

<400> 533

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 120
 gagacgtggc cgagtcaggt ccggcatttc attagccttt tacacccaaa agtcaccctc
 180
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<210> 534

<211> 103

<212> PRT

<213> Homo sapiens

<400> 534

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Asn Met Ala Thr Ala Ser Ile Pro Leu Phe Arg Thr His Lys Asn Trp
          20           25           30
Glu Thr Trp Ser Ser Gln Val Arg His Phe Ile Ser Leu Leu His Pro
          35           40           45
Lys Val Thr Leu Thr Asn Ile Asp Asn Val Leu Asn Lys Asp His Leu
          50           55           60
Arg Trp Leu His Phe Leu Leu Glu Gly Arg Leu Glu Pro Asn Val Arg
          65           70           75           80
Leu Ile Val Gln Gly Tyr Cys Ser Pro Gly Lys Leu Tyr Arg Lys Leu
          85           90           95
Glu Glu Leu Tyr Ala Pro Ser
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<210> 535

<211> 402

<212> DNA

<213> Homo sapiens

<400> 535

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<210> 536

<211> 114

<212> PRT

<213> Homo sapiens

<400> 536

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Met Ala Leu His Thr Trp Arg Leu Val Asn Pro Glu Thr Val Asp Val
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Val Glu Leu Arg Gly Ala Asp Thr Gly Ser His Gln Val Gly Gly Val
          20           25           30
Ser Ser Ala Gly Gly Leu Ala Leu Trp Ser Ala Leu Ala Ile Ser Leu

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      35              40              45
Val Pro Ala Leu Trp Val Tyr Pro Val Ala Val Ala Val Gly Ile Leu
      50              55              60
Met Thr Arg Pro Arg Arg Leu Leu Leu Gly Ser Ile Val Val Leu Gly
      65              70              75              80
Pro Leu Leu Val Ile Ser Pro Trp Ile Pro Arg Leu Ile Thr Glu Pro
      85              90              95
Gly Arg Met Ala Thr Gly Ala Glu Pro Val Leu Ser Pro Ala Val Glu
      100              105              110
Thr Arg

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<210> 537
<211> 404
<212> DNA
<213> Homo sapiens

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<400> 537
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120
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240
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300
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<210> 538
<211> 118
<212> PRT
<213> Homo sapiens

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<400> 538
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Met Pro Thr Ser His His Met Asn Leu Ala Thr Trp His Thr Ile Asn
      20              25              30
Ser Val Tyr Ser Gln Lys Ser Gln Leu Ala Leu Gly Ser Met Arg Tyr
      35              40              45
Asp Ile Glu Asp Thr Gly Gly Ile Asp Arg Leu Phe Lys Leu Ile Glu
      50              55              60
Gln Arg Ala Gly His Trp Leu Ala Met Glu Val Glu Glu Thr Lys Ile
      65              70              75              80
Gln Leu Thr His Gln Asp Ser Arg His Val Pro Leu Asp Arg Ile Glu
      85              90              95
Ala Gly Leu Ser Val Asp Leu Ser Arg Ala Leu Phe Glu Ser Ser Ile
      100              105              110
Asp Asn Leu Leu Glu Arg

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115

<210> 539

<211> 534

<212> DNA

<213> Homo sapiens

<400> 539

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 180
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 420
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 480
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<210> 540

<211> 143

<212> PRT

<213> Homo sapiens

<400> 540

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 Ile Leu Lys Lys Asp His Gln Leu Leu Leu Ala Ile Tyr Gly Lys Lys
 35 40 45
 Gly Asp Thr Ser Asn Ile Ile Thr Val Arg Val Ala Asp Gly Gln Thr
 50 55 60
 Val Gln Gly Glu Val Trp Lys Thr Thr Pro Tyr Gln Val Ala Ala Glu
 65 70 75 80
 Ile Ser Gln Glu Leu Ala Glu Ser Thr Val Ile Ala Lys Val Asn Gly
 85 90 95
 Glu Leu Trp Asp Leu Asp Arg Pro Leu Glu Gly Asp Ser Ser Leu Glu
 100 105 110
 Leu Leu Thr Phe Asp Asn Glu Glu Ala Gln Ala Val Ser Ile Leu Lys
 115 120 125
 Pro Asp Ser Gln Thr Leu Gly Ser Tyr Val Val Asn Tyr Ile Ile
 130 135 140

<210> 541

<211> 551

<212> DNA

<213> Homo sapiens

<400> 541

ggtaccgagc tgcgcgtgtg gtatgcggcc ttctatgcc agaagatgga caagcccatg
 60
 ctgaagcagg ccggtcttgg cgtccacgct gcaggcacc cagaaaaacg cgcctccgtg
 120
 gaggctggagc ccagccagtg ggcgtgtaaa gtgtgttctg ccaccttctt ggagctgcag
 180
 ctcttcaatg gtaaggagga cgtgtgggga gcccagttg taaaactcct gtgtcgattt
 240
 ctctctgact tacgctgtca cctgtctgcg gctgtcgggg gtgtccaga ctttgtcttg
 300
 tctgccccat tgccccacaa tgtagtcgcc agaaccaagg ctttctcagg gtttaaagct
 360
 tctgggcagt ccgcttccc acccccagacc cctgcaggcc tcaactctca ctctctctgg
 420
 ttgggaagtt gcatttcagc tgggcgcctt gactctggag cactggcagg ggccaggggc
 480
 caggagccag ccgtggcatg tgttgtgcac tcttgcttt gttgtctcta cttgacagcc
 540
 ccctcacgcg t
 551

<210> 542

<211> 168

<212> PRT

<213> Homo sapiens

<400> 542

Met	Asp	Lys	Pro	Met	Leu	Lys	Gln	Ala	Gly	Ser	Gly	Val	His	Ala	Ala
1				5					10					15	
Gly	Thr	Pro	Glu	Asn	Ser	Ala	Pro	Val	Glu	Ser	Glu	Pro	Ser	Gln	Trp
			20					25					30		
Ala	Cys	Lys	Val	Cys	Ser	Ala	Thr	Phe	Leu	Glu	Leu	Gln	Leu	Leu	Asn
		35						40				45			
Gly	Lys	Glu	Asp	Val	Trp	Gly	Ala	Pro	Val	Val	Lys	Leu	Leu	Cys	Arg
		50				55					60				
Phe	Leu	Ser	Asp	Leu	Arg	Cys	His	Leu	Ser	Ala	Ala	Val	Gly	Gly	Val
65					70					75				80	
Pro	Asp	Phe	Val	Leu	Ser	Ala	Pro	Leu	Pro	His	Asn	Val	Val	Ala	Arg
				85					90					95	
Thr	Lys	Ala	Phe	Ser	Gly	Phe	Lys	Ala	Ser	Gly	Gln	Ser	Arg	Phe	Pro
			100						105					110	
Pro	Pro	Thr	Pro	Ala	Gly	Leu	Thr	Pro	His	Ser	Ser	Trp	Leu	Gly	Ser
		115					120					125			
Cys	Ile	Ser	Ala	Gly	Arg	Leu	Asp	Ser	Gly	Ala	Leu	Ala	Gly	Ala	Arg
		130				135					140				
Gly	Gln	Glu	Pro	Ala	Val	Ala	Cys	Val	Val	His	Ser	Cys	Leu	Cys	Cys
145					150					155					160
Leu	Tyr	Leu	Thr	Ala	Pro	Ser	Arg								

165

<210> 543
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 543
 nnaaaagccgg acatgaatac cgcgattgct ggcaaaactg tcttgaccat cattctggcc
 60
 ggggggcaaa gcagcgcctt ggcgccgatg accgatcagg tggccaaacc agccgtgccc
 120
 ttatgggga cgtaccgcct gattgacttt tcgctgtcca acattgtcca cagcggttg
 180
 caggacgtct ggatcattga gcaaaacctg ccccatagct taaacagca cctggctggg
 240
 gggcgctcct gggatctgga cgcacccgc ggtggcctga aggtcatgcc gcccttttcc
 300
 gccctgccc atgaggacgg tggcttttcc gaaggcaacg cacacgcgt
 349

<210> 544
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 544
 Xaa Lys Pro Asp Met Asn Thr Arg Ile Ala Gly Lys Thr Val Leu Thr
 1 5 10 15
 Ile Ile Leu Ala Gly Gly Lys Gly Ser Arg Leu Ala Pro Met Thr Asp
 20 25 30
 Gln Val Ala Lys Pro Ala Val Pro Phe Met Gly Thr Tyr Arg Leu Ile
 35 40 45
 Asp Phe Ser Leu Ser Asn Ile Val His Ser Gly Leu Gln Asp Val Trp
 50 55 60
 Ile Ile Glu Gln Asn Leu Pro His Ser Leu Asn Glu His Leu Ala Gly
 65 70 75 80
 Gly Arg Ser Trp Asp Leu Asp Arg Thr Arg Gly Gly Leu Lys Val Met
 85 90 95
 Pro Pro Phe Ser Gly Pro Ala Asp Glu Asp Gly Gly Phe Ser Glu Gly
 100 105 110
 Asn Ala His Ala
 115

<210> 545
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 545
 catgatgcaa aaacagacat gcttatttca aaatataaaa gtgaaaaaga tcgttttagca
 60
 caagaaattg ttggtgtcat cacagggtct gcaatgccgg gtggttcagc aaaccgtatc
 120
 ccaataaag caggctcaaa tccagaaggt tctattgcaa cgcgttttat tgcagaaaca
 180

atgtataacg aactcaaaac agtgggattta actattcaaa atgctggcgg tgtagcgcca
 240
 gatattttac cggggaatgt aacctttaac gatgcttata cttctctacc ttctgggaat
 300
 acgttatata cctataaaat gaaaagtcca ttagtgaaac aagtgcctga agatgcaatg
 360
 ctatttgctt tgggtccccc cccccccccc
 390

<210> 546
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 546
 His Asp Ala Lys Thr Asp Met Leu Ile Ser Lys Tyr Lys Ser Glu Lys
 1 5 10 15
 Asp Arg Leu Ala Gln Glu Ile Val Gly Val Ile Thr Gly Ser Ala Met
 20 25 30
 Pro Gly Gly Ser Ala Asn Arg Ile Pro Asn Lys Ala Gly Ser Asn Pro
 35 40 45
 Glu Gly Ser Ile Ala Thr Arg Phe Ile Ala Glu Thr Met Tyr Asn Glu
 50 55 60
 Leu Lys Thr Val Asp Leu Thr Ile Gln Asn Ala Gly Val Arg Ala
 65 70 75 80
 Asp Ile Leu Pro Gly Asn Val Thr Phe Asn Asp Ala Tyr Thr Phe Leu
 85 90 95
 Pro Phe Gly Asn Thr Leu Tyr Thr Tyr Lys Met Glu Ser Ser Leu Val
 100 105 110
 Lys Gln Val Leu Glu Asp Ala Met Leu Phe Ala Leu Gly Pro Pro Pro
 115 120 125
 Pro Pro
 130

<210> 547
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 547
 aagcttggtt ttctgatttt tattcaaatc tctatcatgg atgaagcatg cagtttcaga
 60
 atcagttcag tgttgacaac atatcaagat attctgcagt caatctcaat gtatgttcac
 120
 gaagcctcca acatatatttg tgggatacca tctttgtcag gcattgtgct aggcactgtc
 180
 cctgcagtga ataagaaaga caggatttct gtatttatgg gccttagtac caagttgttc
 240
 tcaaactttc atgtttgtgt atacaaatca gctgagcct tcaactaaact cnnnnccnn
 300
 nncenn
 306

<210> 548

<211> 90

<212> PRT

<213> Homo sapiens

<400> 548

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Met Asp Glu Ala Cys Ser Phe Arg Ile Ser Ser Val Leu Thr Thr Tyr
 1           5           10           15
Gln Asp Ile Leu Gln Ser Ile Ser Met Tyr Val His Glu Ala Ser Asn
          20           25           30
Ile Phe Cys Gly Ile Pro Ser Leu Ser Gly Ile Val Leu Gly Thr Val
      35           40           45
Pro Ala Val Asn Lys Lys Asp Arg Ile Ser Val Phe Met Gly Leu Ser
    50           55           60
Thr Lys Leu Phe Ser Asn Phe His Val Cys Val Tyr Lys Ser Ala Glu
65           70           75           80
Ala Phe Thr Lys Leu Xaa Xaa Xaa Xaa Xaa
          85           90

```

<210> 549

<211> 780

<212> DNA

<213> Homo sapiens

<400> 549

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nnacgcgtac ttccaacacc tatgctccag tatggaggac gggtaaagtc tcttgtaaat
60
gttttaataca tacacatatt gtctgtaagt atgaagagaa aggcataatca gaaatatctc
120
aattcagcga ttgaaatgt ttactttctg ttattgaaa atttttgttc tttttcacca
180
tggtattttt ttctctctgt gtagaatcgg acagtagcaa caccgagcca tggagtatgg
240
gacatgcgag ggaacaatt ccacacagga gttgaaatca aaatgtgggc tatcgcttgt
300
tttgccacac agaggcagtg cagagaagaa atattgaagg gtttcacaga ccagctgcgt
360
aagatttcta aggatgcagg gatgcccatc cagggccagc catgcttctg caaatatgca
420
cagggggcag acagcgtaga gcccattgtc cggcattcca agaacacata tcttggccta
480
cagcttatta tcgtcatcct gccggggaag acaccagtgt atcggaagt gaaacgtgta
540
ggagacacac ttttgggtat ggctacacaa tgtgttcaag tcaagaatgt aataaaaaa
600
tctctcaaaa ctctgtcaaa cttgtgccta aagataaatg ttaactcgg agggatcaat
660
aatattcttg tacctcatca aagaccttct gtgttccagc aaccagtgat ctttttggga
720
gccgatgtca ctcattccacc tgctggtgat ggaagaagc cttctattgc tgctgttgta
780

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<210> 550

<211> 192

<212> PRT

<213> Homo sapiens

<400> 550

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Asn Arg Thr Val Ala Thr Pro Ser His Gly Val Trp Asp Met Arg Gly
 1           5           10           15
Lys Gln Phe His Thr Gly Val Glu Ile Lys Met Trp Ala Ile Ala Cys
      20           25           30
Phe Ala Thr Gln Arg Gln Cys Arg Glu Glu Ile Leu Lys Gly Phe Thr
      35           40           45
Asp Gln Leu Arg Lys Ile Ser Lys Asp Ala Gly Met Pro Ile Gln Gly
      50           55           60
Gln Pro Cys Phe Cys Lys Tyr Ala Gln Gly Ala Asp Ser Val Glu Pro
      65           70           75           80
Met Phe Arg His Leu Lys Asn Thr Tyr Ser Gly Leu Gln Leu Ile Ile
      85           90           95
Val Ile Leu Pro Gly Lys Thr Pro Val Tyr Ala Glu Val Lys Arg Val
      100          105          110
Gly Asp Thr Leu Leu Gly Met Ala Thr Gln Cys Val Gln Val Lys Asn
      115          120          125
Val Ile Lys Thr Ser Pro Gln Thr Leu Ser Asn Leu Cys Leu Lys Ile
      130          135          140
Asn Val Lys Leu Gly Gly Ile Asn Asn Ile Leu Val Pro His Gln Arg
      145          150          155          160
Pro Ser Val Phe Gln Gln Pro Val Ile Phe Leu Gly Ala Asp Val Thr
      165          170          175
His Pro Pro Ala Gly Asp Gly Lys Lys Pro Ser Ile Ala Ala Val Val
      180          185          190

```

<210> 551

<211> 291

<212> DNA

<213> Homo sapiens

<400> 551

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nnggatccgg attatggggc tattgctaac aggtcaacgg ccatcaaggt gctcgttgcc
60
gtggcaccgc cagccccgga gcctactcgc gagccaccga cgaactccgc tccttccgag
120
gaaccgtctc cgtcgtcaat cgcaccgggc ccgcgggccc cgacgactgc agtaccaccg
180
actagttcgt cgtcggggccg ctgaccgatg cgcccatcgg cgggctcadc tggctggcgc
240
tagcggggggc ttgatgtcc ccataccaca gcgtccgcta aattgccnc c
291

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<210> 552

<211> 67

<212> PRT

<213> Homo sapiens

<400> 552

```

Xaa Asp Pro Asp Tyr Gly Ala Ile Ala Asn Arg Ser Thr Ala Ile Lys
 1           5           10           15
Val Leu Val Ala Val Ala Pro Pro Ala Pro Glu Pro Thr Arg Glu Pro

```

```

                20                25                30
Pro Thr Asn Ser Ala Pro Ser Glu Pro Ser Ser Ser Ile Ala
   35                40                45
Pro Val Pro Pro Ala Pro Thr Thr Ala Val Pro Thr Thr Ser Ser Ser
   50                55                60
Ser Gly Arg
65

```

<210> 553
 <211> 471
 <212> DNA
 <213> Homo sapiens

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<400> 553
ctagccgatg taggattagt aggttttccg agcgtgggta aatctacctt actctcaata
60
gtatctaaag ccaaaccgaa aattgggtgca tatcatttca ctacaattaa acctactta
120
gggtgtgttt ccacaaaaga tcaacgtagt tttgttatgg cagatttacc aggtttaatt
180
gaaggtgcat ctgatggcgt tggattagga catcaatttt taagacatgt agagagaaca
240
aaagttattg ttcacatgat tgatattgagc gggtctgaag gtagagaacc tattgaagat
300
tataaaagta ttaatcaaga attagctgcy tacgagcaac gtttagaaga tagacctcaa
360
atcgtagtag ctaacaagat ggattttacct gaatcacaag ataattttaa cttgttttaa
420
gaagaaattg gcgaagatgt gccagttatt ccagtttcaa caataacgcy t
471

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<210> 554
 <211> 157
 <212> PRT
 <213> Homo sapiens

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<400> 554
Leu Ala Asp Val Gly Leu Val Gly Phe Pro Ser Val Gly Lys Ser Thr
  1                5                10                15
Leu Leu Ser Ile Val Ser Lys Ala Lys Pro Lys Ile Gly Ala Tyr His
  20                25                30
Phe Thr Thr Ile Lys Pro Asn Leu Gly Val Val Ser Thr Lys Asp Gln
  35                40                45
Arg Ser Phe Val Met Ala Asp Leu Pro Gly Leu Ile Glu Gly Ala Ser
  50                55                60
Asp Gly Val Gly Leu Gly His Gln Phe Leu Arg His Val Glu Arg Thr
  65                70                75                80
Lys Val Ile Val His Met Ile Asp Met Ser Gly Ser Glu Gly Arg Glu
  85                90                95
Pro Ile Glu Asp Tyr Lys Val Ile Asn Gln Glu Leu Ala Ala Tyr Glu
 100                105                110
Gln Arg Leu Glu Asp Arg Pro Gln Ile Val Val Ala Asn Lys Met Asp
 115                120                125
Leu Pro Glu Ser Gln Asp Asn Leu Asn Leu Phe Lys Glu Glu Ile Gly

```

130	135	140
Glu Asp Val Pro Val Ile Pro Val Ser Thr Ile Thr Arg		
145	150	155

<210> 555
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 555
 tctagagatt gagaacaatt atggatacag aaatgggtga ttccgtcaaa tatattcgag
 60
 attcggaaatc atgtgaggct cgcgtgctgg agatcttagc cagaagccg tccatgatgg
 120
 tgcagatctt gcgtggcgac ggcttaatta acgaagacca gagattagtc agattatggc
 180
 ttaataaagt acctagaatt gtctgcctgc ttctccggct tagtggtgttc gtcgctgcgg
 240
 caatagggtgc ccgtgcggtg tggggcgggc cttccggtaa tcccgatctt gttcacgcgt
 300

<210> 556
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 556
 Met Asp Thr Glu Met Val Asp Ser Val Lys Tyr Ile Arg Asp Ser Glu
 1 5 10 15
 Ser Cys Glu Ala Arg Val Leu Glu Ile Leu Ala Arg Arg Pro Ser Met
 20 25 30
 Met Val Gln Ile Leu Arg Gly Asp Gly Leu Ile Asn Glu Asp Gln Arg
 35 40 45
 Leu Val Arg Leu Trp Leu Asn Lys Val Pro Arg Ile Val Arg Leu Leu
 50 55 60
 Leu Arg Leu Ser Val Phe Val Ala Ala Ala Ile Gly Ala Arg Ala Val
 65 70 75 80
 Trp Ala Ala Ala Ser Gly Asn Pro Asp Leu Val His Ala
 85 90

<210> 557
 <211> 678
 <212> DNA
 <213> Homo sapiens

<400> 557
 atcttccccg tttatgagga gaatgcgctg cgtgtcgagt ttttcggcga cgaaattgag
 60
 gccctcacga cgaatgaccc gctcaccggg gaggtcatca gcgaggacga gcagggtctac
 120
 gtgttccccg ctaccacta tgcgcggcgc ccggaacgta tggagcgggc catagcgctcc
 180
 atccagcagg agctcgagga gcgcctggcc gttctagagc gtgatgggaa actgttggag
 240

gccccaacggt tacgtatgcg tactacctac gatatacgaga tgatgcagca ggtcggtgcc
 300
 tgtgtctggca tcgaaaacta ttccgcggcac atcgacggac gcgctcccg ctcagccccg
 360
 aactgtctgc ttgactactt tccggaagat tttgtgctcg tcattgatga atccccactg
 420
 accgtcccg agattggcgg gatgtatgag ggggacatga gccgcaagcg gacattggta
 480
 gaacatggtt tccgactgcc cagcgcgatg gacaaccgtc ctctcaaatt cgacgagttc
 540
 acccagcgga tcggccagac tgtctacctg tccgccacgc ccggttcgta cgagaccgaa
 600
 cgagctcacg gcgtcgtcga acaaatcatt cgcccgacag gtctggtgga tccggagatt
 660
 atcgtcaagc ctacgcgt
 678

<210> 558

<211> 226

<212> PRT

<213> Homo sapiens

<400> 558

Ile	Phe	Pro	Val	Tyr	Glu	Glu	Asn	Ala	Leu	Arg	Val	Glu	Phe	Phe	Gly
1				5					10					15	
Asp	Glu	Ile	Glu	Ala	Leu	Thr	Thr	Met	His	Pro	Leu	Thr	Gly	Glu	Val
			20					25					30		
Ile	Ser	Glu	Asp	Glu	Gln	Val	Tyr	Val	Phe	Pro	Ala	Thr	His	Tyr	Val
		35					40				45				
Ala	Gly	Pro	Glu	Arg	Met	Glu	Arg	Ala	Ile	Ala	Ser	Ile	Gln	Gln	Glu
		50			55				60						
Leu	Glu	Glu	Arg	Leu	Ala	Val	Leu	Glu	Arg	Asp	Gly	Lys	Leu	Leu	Glu
65				70					75				80		
Ala	Gln	Arg	Leu	Arg	Met	Arg	Thr	Thr	Tyr	Asp	Ile	Glu	Met	Met	Gln
			85					90					95		
Gln	Val	Gly	Ala	Cys	Ala	Gly	Ile	Glu	Asn	Tyr	Ser	Arg	His	Ile	Asp
			100				105						110		
Gly	Arg	Ala	Pro	Gly	Ser	Ala	Pro	Asn	Cys	Leu	Leu	Asp	Tyr	Phe	Pro
		115				120						125			
Glu	Asp	Phe	Val	Leu	Val	Ile	Asp	Glu	Ser	His	Val	Thr	Val	Pro	Gln
		130			135						140				
Ile	Gly	Gly	Met	Tyr	Glu	Gly	Asp	Met	Ser	Arg	Lys	Arg	Thr	Leu	Val
145				150					155					160	
Glu	His	Gly	Phe	Arg	Leu	Pro	Ser	Ala	Met	Asp	Asn	Arg	Pro	Leu	Lys
			165					170					175		
Phe	Asp	Glu	Phe	Thr	Gln	Arg	Ile	Gly	Gln	Thr	Val	Tyr	Leu	Ser	Ala
			180				185						190		
Thr	Pro	Gly	Ser	Tyr	Glu	Thr	Glu	Arg	Ala	His	Gly	Val	Val	Glu	Gln
		195					200					205			
Ile	Ile	Arg	Pro	Thr	Gly	Leu	Val	Asp	Pro	Glu	Ile	Ile	Val	Lys	Pro
210					215						220				
Thr	Arg														
225															

<210> 559
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 559
 ggatcctatg gagctcaagt tcaagaaaag aaactgtaaa catggagggt ttgtgataaa
 60
 tggaatgcag tcagagggaa ggaactgccn gcttaaagtg tcctatgctg cgtttccag
 120
 agcaatacag tacacagtgg agggcgctac catggagtct ctgggtgaaa gttaggatgg
 180
 tatggtggca ccagccaaac ttctcagggt tcataggcag acagcagctc tggagtggaa
 240
 ctaaagtgtg tccaggagct gaagccctta atcagctagg gctcacacag agtcaaggta
 300
 ggggtcaaaaa cattcagtct gggaccatat ctaga
 335

<210> 560
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 560
 Met Glu Cys Ser Gln Arg Glu Gly Thr Ala Xaa Leu Lys Cys Pro Met
 1 5 10 15
 Leu Arg Phe Pro Glu Gln Tyr Ser Thr Gln Trp Arg Ala Leu Pro Trp
 20 25 30
 Ser Leu Trp Val Lys Val Arg Met Val Trp Trp His Gln Pro Asn Phe
 35 40 45
 Ser Gly Phe Ile Gly Arg Gln Gln Leu Trp Ser Gly Thr Lys Val Tyr
 50 55 60
 Pro Gly Ala Glu Ala Leu Asn Gln Leu Gly Leu Thr Gln Ser Gln Gly
 65 70 75 80
 Arg Val Lys Asn Ile Gln Ser Gly Thr Ile Ser Arg
 85 90

<210> 561
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 561
 ngcgcgcccc ctctctccgat ggcggcggag atccagccca agcctctgac ccgcaagccg
 60
 atcctgctgc agcggatgga ggggtccag gaggtggtga atatggccgt gatcgtgccc
 120
 aaagaggagg gcgtcatcag cgtctccgag gacaggacag ttctgtgttg gttaaagaga
 180
 gacagtggac agtattggcc aagcgtatac catgcaatgc cttgagttaa tattgtcaga
 240
 agattataac aagatgactc ctgtgaaaaa ctatcaagcg catcagagca gagtgcagat
 300

gatacctgttt gtccctggagc tggagtgggt gctgagcaca ggacaggaca agcaatttgc
 360
 ctggcactgc tctgagagtg ggcagcgctt gggaggttat cggaccagtg ctgtggcctc
 420
 aggcctgcaa ttgatgttg aaacccggca tgtgtttatc ggtgaccact caggccca
 477

<210> 562
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 562
 Xaa Ala Pro Pro Pro Pro Met Ala Ala Glu Ile Gln Pro Lys Pro Leu
 1 5 10 15
 Thr Arg Lys Pro Ile Leu Leu Gln Arg Met Glu Gly Ser Gln Glu Val
 20 25 30
 Val Asn Met Ala Val Ile Val Pro Lys Glu Glu Gly Val Ile Ser Val
 35 40 45
 Ser Glu Asp Arg Thr Val Arg Val Trp Leu Lys Arg Asp Ser Gly Gln
 50 55 60
 Tyr Trp Pro Ser Val Tyr His Ala Met Pro
 65 70

<210> 563
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 563
 ccattggcaga cagggagctg agcggcctgc ggacccaggt gcaccagagc atgggtcccc
 60
 tgctcctaca cctgaaggac caatgcccaa ctgtcgccac gggcaatgcc caccceaaga
 120
 aaaggaaggg aaaaggcctc aaccttgccc agggctggaa cccacaggag gccaggggtac
 180
 ggggcagacg gatggcagca gcactgcctg agagtgggg gagctccca ggggcagcaa
 240
 gtggcgggca gaggggtctg ccatctgcac tggtttctgt gaccacagtt ggctgccccg
 300
 ctccccact gcaccactga cgaagcgaga ccctgcctca aaaaaaaaa caaaaaacia
 360
 aacaaaaa aaactcaaac ttcacactgg agatctgtgc aat
 403

<210> 564
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 564
 Met Ala Asp Arg Glu Leu Ser Gly Leu Arg Thr Gln Val His Gln Ser
 1 5 10 15
 Met Val Pro Leu Leu Leu His Leu Lys Asp Gln Cys Pro Thr Val Ala

```

                20                25                30
Thr Gly Asn Ala His Pro Lys Lys Arg Lys Gly Lys Gly Leu Asn Leu
      35                40                45
Gly Gln Gly Trp Asn Pro Gln Glu Ala Arg Val Arg Gly Arg Arg Met
      50                55                60
Ala Ala Ala Leu Pro Glu Ser Trp Gly Ser Ser His Gly Ala Ala Ser
      65                70                75                80
Gly Gly Gln Arg Val Trp Pro Ser Ala Leu Val Ser Val Thr Thr Val
      85                90                95
Gly Leu Pro Ala Pro Pro Leu His His
      100                105

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<210> 565

<211> 311

<212> DNA

<213> Homo sapiens

<400> 565

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nctctccat ggagcagccc catcttcaact cttcacctgg ggccaggcct tccacagcag
60
ccaccaccca gcgaccacag agaggctgcg cggaggacac aggagagagg gagcccacgg
120
gcacgatctc caccggcttt ccagctccc tgggtcagcc ccacgggacc tctctctctc
180
tctcccatat ctccaagcca gccttgcata tagtaagagc tgtgatcagg atggaagagg
240
gcttggggcg cacagacctg gacaatgtcc cagtgagggc tggaggtgct agaagggcac
300
aggaggcccc n
311

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<210> 566

<211> 101

<212> PRT

<213> Homo sapiens

<400> 566

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Met Glu Gln Pro His Leu His Ser Ser Pro Gly Ala Arg Pro Ser Thr
  1                5                10                15
Ala Ala Thr Thr Gln Arg Pro Gln Arg Gly Cys Ala Glu Asp Thr Gly
      20                25                30
Glu Arg Glu Pro Thr Gly Thr Ile Ser Thr Gly Phe Pro Ser Ser Leu
      35                40                45
Gly Gln Pro His Gly Thr Ser Pro Pro Leu Ser His Ile Ser Lys Pro
      50                55                60
Ala Leu His Ile Val Arg Ala Val Ile Arg Met Glu Arg Gly Leu Gly
      65                70                75                80
Arg Thr Asp Leu Asp Asn Val Pro Val Arg Ala Gly Gly Ala Arg Arg
      85                90                95
Ala Gln Glu Ala Pro
      100

```

<210> 567

<211> 929

<212> DNA

<213> Homo sapiens

<400> 567

atcacatcgg tcgctgaacc ccgacgagcc tcacctgtgc gaaatattca tccttgagat
 60
 cagcccacgt gccgtcgacc tctacctcgg tgagggctgc gggcggtgac caacagccga
 120
 cctcgtcctc ggctccactc atggcggaac gtccgctgc cagtcggggg atcgtcgggg
 180
 catgggcat gatgagcagg ttatccacat cgtcgtcgat ttctccgatg cgccgacgca
 240
 cggatatcagt gccgcagtaa tagagggctc gcatgaattc gaccggacaa tccagttgga
 300
 ggcatcccca ggtctggcgg gtgcgtaggg catcggagac cagagcatgt ccaacattgc
 360
 gcagtcctaa acgcgtgccg acctcacggg cctgacggcg ccccacgtcg gtgagcggac
 420
 gctcccgcac ccgcccga gcatgggatg cgggctgtgc atgtctcatg aggaacagag
 480
 tgtgcatgga tccatcgttg cacttcgcgg tcgcccgggt tctacgatgt tggcatgccg
 540
 ttgacggatt tgggcattga tgaggcgcgt acctaccgcc gaaacgtccc tgaaccgat
 600
 ggtttcgact ctttttgggc cgagaccctc gatgagtatt ccggcgcttc ccaagatctg
 660
 acggcgtgac ctttcgataa ccgtcaggct ctgatagata cctgggattt gtcgtgggtg
 720
 gggtatcaca actctcgggt gagcgggtga ttacatgccc cagccgctgt gaacggccca
 780
 ttcccccttg tcatcgagta cctcgggtac tcgagttcgc gtggtgtgcc gattggatca
 840
 gtcttcgctg ctgctggcta tgcacatata gtcgtcgatc cactgggtca ggggtggggc
 900
 caccacaacct tgacggaaaa ctgtccgga
 929

<210> 568

<211> 71

<212> PRT

<213> Homo sapiens

<400> 568

Met Pro Leu Thr Asp Leu Gly Ile Asp Glu Ala Arg Thr Tyr Arg Pro
 1 5 10 15
 Asn Val Pro Glu Pro Asp Gly Phe Asp Ser Phe Trp Ala Glu Thr Leu
 20 25 30
 Asp Glu Tyr Ser Gly Val Pro Gln Asp Leu Thr Ala Val Pro Phe Asp
 35 40 45
 Asn Arg Gln Ala Leu Ile Asp Thr Trp Asp Leu Ser Trp Val Gly Tyr
 50 55 60
 His Asn Ser Arg Val Ser Gly
 65 70

<210> 569
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 569
 ncgcaaacctt caacggtgcc atctgccata ttccagggat gccagatttg gatggaaaat
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 accatatcac tctcgattca gaattcgta tggatttagt ggcctttaac aaaacgctac
 120
 ctgctcgatta cttaatgggc gaaggaacgg aacttgtgta ttcaaacatg gaagaactac
 180
 ctgaatgccc atattatcca aaagatcaaa agccaatcgt gattgggaaa aacacaaaac
 240
 tcaaggaaca accaacagcc gttgctctct tctcgatgt tgataaacgg ccagagatta
 300
 aatcaaaaat cttagaccgc tatgataatg atattgaaat ccgtacttgg ggcgggtactt
 360
 cccatgtcta n
 371

<210> 570
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 570
 Met Pro Asp Leu Asp Gly Lys Tyr His Ile Thr Leu Asp Ser Glu Phe
 1 5 10 15
 Val Leu Asp Leu Val Ala Phe Asn Lys Thr Leu Pro Val Asp Tyr Leu
 20 25 30
 Met Val Glu Gly Thr Glu Leu Val Tyr Ser Asn Met Glu Glu Leu Pro
 35 40 45
 Glu Cys Pro Tyr Tyr Pro Lys Asp Gln Lys Pro Ile Val Ile Gly Lys
 50 55 60
 Asn Thr Lys Leu Lys Glu Gln Pro Thr Ala Val Ala Leu Phe Ser Asp
 65 70 75 80
 Val Asp Lys Arg Pro Glu Ile Lys Ser Lys Ile Leu Asp Arg Tyr Asp
 85 90 95
 Asn Asp Ile Glu Ile Arg Thr Trp Gly Gly Thr Ser His Val Xaa
 100 105 110

<210> 571
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 571
 nacgcgtatc ttcgctgggc cacaccagac gtggcattaa acgacgtcac aagaacgaca
 60
 ccgggccttg acgggcccac gcacgaagag gccaaagacac tgaccgagac tactgtttcc
 120
 gttccacact ctttcgcca cctcggcgct cgagaagata tctgccaggc gctggaaggg
 180

gtgggaattg tctccccgtt cccgatccag gccatgtcga tccccattgc cgtcgagggc
 240
 acggatctta ttgggcaggc gcgtactggc actggcaaaa cactcgctt cgcatcacc
 300
 atcttgacgc gcataccct gcccggtgac gaaggttggg aagaactcac caccaaaggc
 360
 aagcccccaa gcaactgtga tgtgcccta cccgggagct aggtcgg
 407

<210> 572
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 572
 Leu Thr Glu Thr Thr Val Ser Val Pro Thr Ser Phe Ala Asp Leu Gly
 1 5 10 15
 Val Arg Glu Asp Ile Cys Gln Ala Leu Glu Gly Val Gly Ile Val Ser
 20 25 30
 Pro Phe Pro Ile Gln Ala Met Ser Ile Pro Ile Ala Val Glu Gly Thr
 35 40 45
 Asp Leu Ile Gly Gln Ala Arg Thr Gly Thr Gly Lys Thr Leu Ala Phe
 50 55 60
 Gly Ile Thr Ile Leu Gln Arg Ile Thr Leu Pro Gly Asp Glu Gly Trp
 65 70 75 80
 Glu Glu Leu Thr Thr Lys Gly Lys Pro Pro Ser Thr Arg Asp Val Pro
 85 90 95
 Leu Pro Gly Ser
 100

<210> 573
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 573
 acgcgtctac cgtaggatcc atgaccttcc gcaagaccga ccaccacaag aacgccattg
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 actacagagt cgccggacta atgtggctcg ctgctgcccg gccagatggg gccggcatcg
 120
 tcgaggtgct cgaccacggc aaggatggc tcaccgaacc cgaattgtcc actgggcacc
 180
 ccaccgcga ggcagccgag gactttggcc gccgactggc tcacaccac gcagccgggg
 240
 cctcacacct gggggctgca cctgacgggt ttgttccga cgaagggtat atcgccgtg
 300
 ctccccctgc actgccgtcc gaaccaatct cctcctgggg agagttttac gctcagtgcc
 360
 gcatcgaacc atatatggac agtctcgacg ctg
 393

<210> 574
 <211> 124
 <212> PRT

<213> Homo sapiens

<400> 574

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Met Thr Phe Arg Lys Thr Asp His His Lys Asn Ala Ile Asp Tyr Glu
 1           5           10           15
Val Ala Gly Leu Met Trp Leu Ala Ala Arg Pro Asp Gly Ala Gly
      20           25           30
Ile Val Glu Val Leu Asp His Gly Lys Gly Trp Leu Thr Glu Pro Glu
      35           40           45
Leu Ser Thr Gly His Pro Thr Arg Glu Ala Ala Glu Asp Phe Gly Arg
      50           55           60
Arg Leu Ala His Thr His Ala Ala Gly Ala Ser His Leu Gly Ala Ala
      65           70           75           80
Pro Asp Gly Phe Val Pro Asp Asp Gly Tyr Ile Gly Arg Ala Pro Leu
      85           90           95
Pro Leu Pro Ser Glu Pro Ile Ser Ser Trp Gly Glu Phe Tyr Ala Gln
      100          105          110
Cys Arg Ile Glu Pro Tyr Met Asp Ser Leu Asp Ala
      115          120

```

<210> 575

<211> 372

<212> DNA

<213> Homo sapiens

<400> 575

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nntatccatg cagacatggg accaggggtct ctgagggcag gaagcaaagt ggggtagggg
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gatgggacaa gatgccctgg tgctaaggcc tctggagctg gagctgggta tagggatgat
120
accaggcacc ctgagtcact cgcacctcac aatggggccg cttctgggag ccagtggggt
180
tatggggctg gcaatgtgct gggttatgag gatggatcag aacttcagg ccctcagggg
240
actgggggtca gaacagccta tggagaaagg tcaaggggcc ttgggcctag gagtacaggg
300
ccaggggggtg aggcaggcct tagagatggt tcaggaggcc tccaaggaat gggatcagca
360
gatgggcccg gt
372

```

<210> 576

<211> 124

<212> PRT

<213> Homo sapiens

<400> 576

```

Xaa Ile His Ala Asp Met Gly Pro Gly Ser Leu Arg Ala Gly Ser Lys
 1           5           10           15
Val Gly Glu Gly Asp Gly Thr Arg Cys Pro Gly Ala Lys Ala Ser Gly
      20           25           30
Ala Gly Ala Gly Tyr Arg Asp Asp Thr Arg His Pro Glu Ser Leu Ala
      35           40           45
Pro His Asn Gly Ala Ala Ser Gly Ser Gln Trp Ala Tyr Gly Ala Gly

```

```

      50              55              60
Asn Val Leu Gly Tyr Glu Asp Gly Ser Glu Leu Pro Gly Pro Gln Gly
65              70              75              80
Thr Gly Val Arg Thr Ala Tyr Gly Glu Arg Ser Arg Gly Leu Gly Pro
      85              90              95
Arg Ser Thr Gly Pro Gly Gly Glu Ala Gly Phe Arg Asp Gly Ser Gly
      100              105              110
Gly Leu Gln Gly Met Gly Ser Ala Asp Gly Pro Gly
      115              120

```

<210> 577

<211> 432

<212> DNA

<213> Homo sapiens

<400> 577

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nagcgcgaatg tcatgatgtc ggatttgtca atgtcggatt tctcatccca gccatcaccc
60
ccgcagcgcc gggcgcggtat gaccagcggc cagcgccgtg aacagctcat cagcgtggcc
120
cgtcgcctct tcgcagacaa tggcatggca gggacctccg tcgaggagat cgccgctacc
180
gcgggagtct ccaaaccctt catctacgag catttcgggt ccaaggatgg gctgtacgcc
240
gtcgtcgtat accgcgaggt acgccaccta caagattccc tcaacgcgcg catgaccgcc
300
ccaaagcaag gcccgaaacg caccctggag tcagcggtag tggccctgct ggactacatc
360
gacgaccgtc cagacggttt tcggatcatc tcgcgagact cctcggtcgg ttcagccacc
420
ggttcgtacg cg
432

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<210> 578

<211> 118

<212> PRT

<213> Homo sapiens

<400> 578

```

Met Thr Ser Gly Gln Arg Arg Glu Gln Leu Ile Ser Val Ala Arg Arg
1              5              10              15
Leu Phe Ala Asp Asn Gly Met Ala Gly Thr Ser Val Glu Glu Ile Ala
      20              25              30
Ala Thr Ala Gly Val Ser Lys Pro Val Ile Tyr Glu His Phe Gly Ser
      35              40              45
Lys Asp Gly Leu Tyr Ala Val Val Val Asp Arg Glu Val Arg His Leu
      50              55              60
Gln Asp Ser Leu Asn Ala Ala Met Thr Arg Pro Lys Gln Gly Pro Lys
      65              70              75              80
Arg Thr Leu Glu Ser Ala Val Leu Ala Leu Leu Asp Tyr Ile Asp Asp
      85              90              95
Arg Pro Asp Gly Phe Arg Ile Ile Ser Arg Asp Ser Ser Val Gly Ser
      100              105              110
Ala Thr Gly Ser Tyr Ala

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115

<210> 579
 <211> 320
 <212> DNA
 <213> Homo sapiens

<400> 579
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 ctgctcccag ggatcaccac cttaccagc gggccacctg ctccccgtt ccccgcgagg
 120
 cccggcccct ggctgcgcag acccctcttc agcctgaagc tgtccgacac agaggacgtc
 180
 ttctctcgcc gcgcggggcc gctcgaggtc ccggccgaca gccgcgtgtt cgtgcaggcg
 240
 gccttggccc gtccctcccc gcgctggggc ctggccctgc accgctgtct agtgacgccc
 300
 tcctcacgcc cggccccggg
 320

<210> 580
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 580
 Met Leu Gly Thr Val Leu Leu Leu Ala Leu Leu Pro Gly Ile Thr Thr
 1 5 10 15
 Leu Pro Ser Gly Pro Pro Ala Pro Pro Phe Pro Ala Ala Pro Gly Pro
 20 25 30
 Trp Leu Arg Arg Pro Leu Phe Ser Leu Lys Leu Ser Asp Thr Glu Asp
 35 40 45
 Val Phe Pro Arg Arg Ala Gly Pro Leu Glu Val Pro Ala Asp Ser Arg
 50 55 60
 Val Phe Val Gln Ala Ala Leu Ala Arg Pro Ser Pro Arg Trp Gly Leu
 65 70 75 80
 Ala Leu His Arg Cys Ser Val Thr Pro Ser Ser Arg Pro Ala Pro
 85 90 95

<210> 581
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 581
 nacgacggca accattcgct gtggaaggag ctgaacggcc agctcgacgt gcagtttttc
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 cagctcgcca tgggcttcaa gacgccagta cgcattgcaca gcgtcgacc caagaccgc
 120
 gaagcccgcg aggtgcattt ccgcccgctg ctgttcaact atgccaagac cagcgtggag
 180
 accaagcagc tgaccggcga cctgggtttc tccggtttca agctgttcaa ggcgccggaa
 240

ctggatcgcc atgacgtgct gtcgtttctc ggcgccagtt acttccgtgc ggtggacgca
 300
 acccgccagt acggcctctc cgcacgcggc ctggcgattg atacctacgc gaaaaaacgc
 360
 gaggaattcc ccgacttcac gcagttctgg ttcgaaaccc cgagcaagga cccacgcgt
 419

<210> 582
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 582
 Xaa Asp Gly Asn His Ser Leu Trp Lys Glu Leu Asn Gly Gln Leu Asp
 1 5 10 15
 Val Gln Phe Phe His Val Gly Met Gly Phe Lys Thr Pro Val Arg Met
 20 25 30
 His Ser Val Asp Pro Lys Thr Arg Glu Ala Arg Glu Val His Phe Arg
 35 40 45
 Pro Ser Leu Phe Asn Tyr Ala Lys Thr Thr Val Asp Thr Lys Gln Leu
 50 55 60
 Thr Gly Asp Leu Gly Phe Ser Gly Phe Lys Leu Phe Lys Ala Pro Glu
 65 70 75 80
 Leu Asp Arg His Asp Val Leu Ser Phe Leu Gly Ala Ser Tyr Phe Arg
 85 90 95
 Ala Val Asp Ala Thr Arg Gln Tyr Gly Leu Ser Ala Arg Gly Leu Ala
 100 105 110
 Ile Asp Thr Tyr Ala Lys Lys Arg Glu Glu Phe Pro Asp Phe Thr Gln
 115 120 125
 Phe Trp Phe Glu Thr Pro Ser Lys Asp Pro Arg
 130 135

<210> 583
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 583
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 gattatatgg agcaggggatg ggagccggag acgctggtga acctagtgc cctcagggc
 120
 tatagctatg cgaatttggga gcatgctgat catgatgtca agacgatgaa cgaactcatc
 180
 cgtgactttg agcttaactcg tatctcccat acgcgagcca cactcccat ggacaagctt
 240
 gtgtttttga acaagcatca cttgacaaat aagctggcgc tcgccacgac gtgtgagcag
 300
 accaaacaag acctattgtc gcgtatccgg ccgatcacta cctcgtggta cggcgattat
 360
 tcagatgatt atatcctgcg cgtcgtgaaca ctgggacccc aacgcgt
 407

<210> 584

<211> 135
 <212> PRT
 <213> Homo sapiens

<400> 584
 Leu Leu Ile Asn Ala Asp Gly Thr Lys Leu Ser Lys Arg Ser Gly Asp
 1 5 10 15
 Val Arg Val Ala Asp Tyr Met Glu Gln Gly Trp Glu Pro Glu Thr Leu
 20 25 30
 Val Asn Leu Val Ala Leu Thr Gly Tyr Ser Tyr Ala Asn Leu Glu His
 35 40 45
 Ala Asp His Asp Val Lys Thr Met Asn Glu Leu Ile Arg Asp Phe Glu
 50 55 60
 Leu Thr Arg Ile Ser His Thr Arg Ala Thr Leu Pro Met Asp Lys Leu
 65 70 75 80
 Val Phe Leu Asn Lys His His Leu Thr Asn Lys Leu Ala Leu Ala Thr
 85 90 95
 Thr Cys Glu Gln Thr Lys Gln Asp Leu Leu Ser Arg Ile Arg Pro Ile
 100 105 110
 Thr Thr Ser Trp Tyr Gly Asp Tyr Ser Asp Asp Tyr Ile Leu Arg Val
 115 120 125
 Val Thr Leu Gly Pro Gln Arg
 130 135

<210> 585
 <211> 502
 <212> DNA
 <213> Homo sapiens

<400> 585
 nnacgcgtcc tcgctggata tgaggctgtg aagagggaaac gctgcgtcat tgatctggac
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 gatattttgt tgtgcgcggg gggattgttg gttcagcacc gtgacatcac tgaggagatt
 120
 cgggctcggt accgacattt cggtgtcgac gaataccagg acgtttctcc gctgcagcat
 180
 aggttgcttg aactgtgggt tggcgatcga aatgatgtat gcgtcgtggg agatccgcac
 240
 caggccattc actcttatgc aggcgcacga gctgactacc tcctcgactt cggttccgat
 300
 catcctggcg ctaaacgcat cgatttgggt cgcaactacc gctccactcc cgagatcggt
 360
 cagttggcca atgaagttct tgtcaaccgt atgactccag aggaggcttt ggaacatggc
 420
 agggggagtc cattgttttc gcgggggtcga tccgggtccc agcccatcta tcaggctctc
 480
 ggggacgatg cctccgaagc tt
 502

<210> 586
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 586

Xaa Arg Val Leu Ala Gly Tyr Glu Ala Val Lys Arg Glu Arg Cys Val
 1 5 10 15
 Ile Asp Leu Asp Asp Ile Leu Leu Cys Ala Val Gly Leu Leu Val Gln
 20 25 30
 His Arg Asp Ile Thr Glu Glu Ile Arg Ala Arg Tyr Arg His Phe Val
 35 40 45
 Val Asp Glu Tyr Gln Asp Val Ser Pro Leu Gln His Arg Leu Leu Glu
 50 55 60
 Leu Trp Phe Gly Asp Arg Asn Asp Val Cys Val Val Gly Asp Pro His
 65 70 75 80
 Gln Ala Ile His Ser Tyr Ala Gly Ala Arg Ala Asp Tyr Leu Leu Asp
 85 90 95
 Phe Val Ala Asp His Pro Gly Ala Lys Arg Ile Asp Leu Val Arg Asn
 100 105 110
 Tyr Arg Ser Thr Pro Glu Ile Val Gln Leu Ala Asn Glu Val Leu Val
 115 120 125
 Asn Arg Met Thr Pro Glu Glu Ala Leu Glu His Gly Arg Gly Val Thr
 130 135 140
 Leu Val Ser Arg Gly Arg Ser Gly Pro Glu Pro Ile Tyr Gln Ala Leu
 145 150 155 160
 Gly Asp Asp Ala Ser Glu Ala
 165

<210> 587

<211> 746

<212> DNA

<213> Homo sapiens

<400> 587

gcgtctctgcc tcgagggcct cgggagcttc cgctgcctct gttggccagg ctacagcggc
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 gagctgtgctg aggtggacga ggacgagtgt gcatcgagcc cctgccagca tgggggccga
 120
 tgccctgcagc gctctgaccc ggccctctac ggggggtgtcc aggcgcgctt ccttggcgcc
 180
 ttcagcttcc gccatgtctgc ggggttctctg tgccactgcc ctctcggtt tgaggagacc
 240
 gactgcggtg tggaggtgga cgagtgtgcc tcacggccat gcctcaatgg agggcaactgc
 300
 caggacctgc ccaatggctt ccagtgtcac tgcccagatg gctacgcagg gccgacatgt
 360
 gaggaagatg tggatgaatg cctgtccgat ccctgcctgc acggcggaac ctgcagtgac
 420
 actgtggcag gctatatctg caggtgcccc gagacctggg gtggggcgca ctgttctgtg
 480
 cagctcaactg gctgccaggg ccacacctgc ccgctggctg ccactgcac ccctatcttc
 540
 gactctgggg tccacagtta cgtctgccac tgcccacctg gtacccatgg accgttctgt
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 ggccagaata ccacctctc tgtgatggct gggagcccc ttcaggcatc agtgccagct
 660
 ggtggccccc tgggtctggc actgaggttt cgcaccacac tgcccgtgg gaccttggcc
 720

actcgcaatg acaccaagga aagctt
746

<210> 588

<211> 248

<212> PRT

<213> Homo sapiens

<400> 588

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Ala Ser Cys Leu Glu Gly Leu Gly Ser Phe Arg Cys Leu Cys Trp Pro
 1          5          10          15
Gly Tyr Ser Gly Glu Leu Cys Glu Val Asp Glu Asp Glu Cys Ala Ser
 20          25          30
Ser Pro Cys Gln His Gly Gly Arg Cys Leu Gln Arg Ser Asp Pro Ala
 35          40          45
Leu Tyr Gly Gly Val Gln Ala Ala Phe Pro Gly Ala Phe Ser Phe Arg
 50          55          60
His Ala Ala Gly Phe Leu Cys His Cys Pro Pro Gly Phe Glu Gly Ala
 65          70          75          80
Asp Cys Gly Val Glu Val Asp Glu Cys Ala Ser Arg Pro Cys Leu Asn
 85          90          95
Gly Gly His Cys Gln Asp Leu Pro Asn Gly Phe Gln Cys His Cys Pro
100          105          110
Asp Gly Tyr Ala Gly Pro Thr Cys Glu Glu Asp Val Asp Glu Cys Leu
115          120          125
Ser Asp Pro Cys Leu His Gly Gly Thr Cys Ser Asp Thr Val Ala Gly
130          135          140
Tyr Ile Cys Arg Cys Pro Glu Thr Trp Gly Gly Arg Asp Cys Ser Val
145          150          155          160
Gln Leu Thr Gly Cys Gln Gly His Thr Cys Pro Leu Ala Ala Thr Cys
165          170          175
Ile Pro Ile Phe Glu Ser Gly Val His Ser Tyr Val Cys His Cys Pro
180          185          190
Pro Gly Thr His Gly Pro Phe Cys Gly Gln Asn Thr Thr Phe Ser Val
195          200          205
Met Ala Gly Ser Pro Ile Gln Ala Ser Val Pro Ala Gly Gly Pro Leu
210          215          220
Gly Leu Ala Leu Arg Phe Arg Thr Thr Leu Pro Ala Gly Thr Leu Ala
225          230          235          240
Thr Arg Asn Asp Thr Lys Glu Ser
245

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<210> 589

<211> 381

<212> DNA

<213> Homo sapiens

<400> 589

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atctcacaag tacaattaca gtctcaagaa ctgagctatc agcaaaagca aggtcttcag
 60
ccagtacctc tgcaagccac tatgagtgtc gcaactggta tccagccatc gcctgtaaat
120
gtgggtgggtg taacttcagc tttaggtcag cagccttcca ttccagtttt ggctcaaccc
180

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cagctaccat attctcaggc ggctcctcca gtgcaaaactc cccttcaggc ggcaccacca
 240
 ccccaacagt tacagtatgg acaacagcaa ccaatgggtt ctacacagat ggcaccaggc
 300
 catgtcaaat cagtgactca aaatcctgct tcagagtatg tacaacagca gccaatcttt
 360
 caaacagcaa tgtcctccgg a
 381

<210> 590

<211> 127

<212> PRT

<213> Homo sapiens

<400> 590

Ile	Ser	Gln	Val	Gln	Leu	Gln	Ser	Gln	Glu	Leu	Ser	Tyr	Gln	Gln	Lys
1				5					10					15	
Gln	Gly	Leu	Gln	Pro	Val	Pro	Leu	Gln	Ala	Thr	Met	Ser	Ala	Ala	Thr
			20					25					30		
Gly	Ile	Gln	Pro	Ser	Pro	Val	Asn	Val	Val	Gly	Val	Thr	Ser	Ala	Leu
		35					40					45			
Gly	Gln	Gln	Pro	Ser	Ile	Ser	Ser	Leu	Ala	Gln	Pro	Gln	Leu	Pro	Tyr
		50				55					60				
Ser	Gln	Ala	Ala	Pro	Pro	Val	Gln	Thr	Pro	Leu	Pro	Gly	Ala	Pro	Pro
65					70					75				80	
Pro	Gln	Gln	Leu	Gln	Tyr	Gly	Gln	Gln	Gln	Pro	Met	Val	Ser	Thr	Gln
			85						90					95	
Met	Ala	Pro	Gly	His	Val	Lys	Ser	Val	Thr	Gln	Asn	Pro	Ala	Ser	Glu
			100					105					110		
Tyr	Val	Gln	Gln	Gln	Pro	Ile	Leu	Gln	Thr	Ala	Met	Ser	Ser	Gly	
		115					120					125			

<210> 591

<211> 684

<212> DNA

<213> Homo sapiens

<400> 591

tcgaccatgg atcatctgcg ccacggcacc caccctgcgtg gttatgcgca gaagaacccg
 60
 aagcaggaat acaagcgcgga gtgcgttcacc ctgttctccg agctgctgga ctgcgatcaag
 120
 cgcgattcga ttccgggtcct ctccacagtc caggggcccgg gggaaaaatc cgtatcgaaa
 180
 naaaaaagcgc gcctgcgtca ggaagccgaa gccctggccc agcgcatgca gttcagagcac
 240
 gctgaagccc caggcctgga cgcgccggaa atcctcggtg aagaagtcca tgcgcacctg
 300
 gccaccgcgc cggtacgcaa cgagcagaag ctgggcccga acgaactgtg ctactgcggt
 360
 tcgggcaaga agtacaagca ctgccacggt cagatcagct aaggtcttta ccgatactg
 420
 aaatacctgc gcgcgacccg gcattagccc tcgcggcggt ttccattttg aaacactgcc
 480

cttgtgacgg cagtgcagat atcacattaa aaggagggca ttcattgggtg ttggttctgg
 540
 gtcccttggcc tacgttgcac cgggttgccg gttttgaact cggatcgcc tcggccggta
 600
 tcaagcgccc tgggcgcaag gatgtggtgg cgaatcgctg cgccgaaggt tccacgggtg
 660
 cgggggtggt taccctcaac gcgt
 684

<210> 592

<211> 133

<212> PRT

<213> Homo sapiens

<400> 592

Ser	Thr	Met	Asp	His	Leu	Arg	His	Gly	Ile	His	Leu	Arg	Gly	Tyr	Ala
1				5				10						15	
Gln	Lys	Asn	Pro	Lys	Gln	Glu	Tyr	Lys	Arg	Glu	Ser	Phe	Thr	Leu	Phe
		20						25					30		
Ser	Glu	Leu	Leu	Asp	Ser	Ile	Lys	Arg	Asp	Ser	Ile	Arg	Val	Leu	Phe
		35					40					45			
His	Val	Gln	Gly	Pro	Gly	Glu	Lys	Ser	Val	Ser	Lys	Xaa	Lys	Ala	Arg
		50				55				60					
Leu	Arg	Gln	Glu	Ala	Glu	Ala	Leu	Ala	Gln	Arg	Met	Gln	Phe	Glu	His
				70						75				80	
Ala	Glu	Ala	Pro	Gly	Leu	Asp	Ala	Pro	Glu	Ile	Leu	Gly	Glu	Glu	Val
				85					90					95	
Asp	Val	Ala	Leu	Ala	Thr	Ala	Pro	Val	Arg	Asn	Glu	Gln	Lys	Leu	Gly
			100					105					110		
Arg	Asn	Glu	Leu	Cys	Tyr	Cys	Gly	Ser	Gly	Lys	Lys	Tyr	Lys	His	Cys
		115					120					125			
His	Gly	Gln	Ile	Ser											
															130

<210> 593

<211> 615

<212> DNA

<213> Homo sapiens

<400> 593

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 120
 gataccatcc ccgcgccgct aggcacgcca cgaatggtga cggccaccat ccagacccca
 180
 gtcataccta ctacacgtgg tcgattcgtg atcgcccccg tcatgatgcg caccatcgac
 240
 ccggtttgcca tggcccgcca tcacaccgat ctcggtcagg ttgcgaagt cattgtcacy
 300
 ccaaggatcg tcgatttggg cgctccgggg gagctcgggg gtcagggatt cgacacaagg
 360
 tcctcagcga tccatgcggg acgacgtggt cccgacgatg ccatggtgcg cgattggcac
 420

accggagact cgggtgcgacg cattcactgg cgctccaccg ctcaccgcgg ggacctcatg
 480
 gtcgatgcgg aggagcaggc ctggaaccca tccgtcgtca tegtgttgga ttctcggggc
 540
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 600
 tccatctcga cgcgt
 615

<210> 594

<211> 205

<212> PRT

<213> Homo sapiens

<400> 594

Xaa	Arg	Val	Gln	Thr	Ala	Arg	Ser	Leu	Ala	Pro	Val	Arg	Ile	Ala	Leu
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Gly	Ser	Gln	Thr	Cys	Glu	Thr	Val	Thr	Val	Glu	Arg	Arg	Gly	Gly	Leu
			20					25					30		
Pro	Leu	Arg	Ala	Ala	Arg	Phe	Thr	Asp	Thr	Ile	Pro	Ala	Pro	Leu	Gly
		35					40					45			
Gln	Pro	Arg	Trp	Ser	Thr	Ala	Thr	Ile	Gln	Thr	Pro	Val	Ile	Pro	Thr
		50				55				60					
Thr	Arg	Gly	Arg	Phe	Val	Ile	Gly	Pro	Val	Met	Met	Arg	Thr	Ile	Asp
		65			70				75					80	
Pro	Phe	Gly	Met	Ala	Arg	His	His	Thr	Asp	Leu	Gly	Gln	Val	Ala	Glu
			85						90					95	
Val	Ile	Val	Thr	Pro	Arg	Ile	Val	Asp	Leu	Gly	Ala	Ser	Gly	Glu	Leu
			100					105						110	
Gly	Gly	Gln	Gly	Phe	Asp	Thr	Arg	Ser	Ser	Ala	Ile	His	Ala	Gly	Arg
		115				120						125			
Arg	Gly	Pro	Asp	Asp	Ala	Met	Val	Arg	Asp	Trp	His	Thr	Gly	Asp	Ser
		130			135					140					
Val	Arg	Arg	Ile	His	Trp	Arg	Ser	Thr	Ala	His	Arg	Gly	Asp	Leu	Met
				150					155					160	
Val	Arg	Cys	Glu	Glu	Gln	Ala	Trp	Asn	Pro	Ser	Val	Val	Ile	Val	Leu
			165					170						175	
Asp	Ser	Arg	Ala	Arg	Arg	His	Ala	Gly	Thr	Gly	Pro	Asp	Ala	Ser	Phe
			180					185						190	
Glu	Trp	Ala	Val	Asn	Ala	Val	Ala	Ser	Ile	Ser	Thr	Arg			
		195				200						205			

<210> 595

<211> 303

<212> DNA

<213> Homo sapiens

<400> 595

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 120
 gcctgtgccc gcaaccgccc cgaaattctc tccctggcac cgtgtccgct ttacggagcc
 180

cgagcaagg ctcagaaaaa tgtcccagcc aaaaacatgg tacatgcctg tcatcaggca
 240
 agtcttcaaa gagcggctgg gaccaggggc cgagggacct cgtttagagg cggcttaggg
 300
 gga
 303

<210> 596

<211> 88

<212> PRT

<213> Homo sapiens

<400> 596

Met	Leu	Leu	Asn	Pro	Gly	Asp	Leu	Thr	Val	Glu	Gly	Arg	Pro	His	Gly
1			5					10					15		
Ala	Ile	Gly	Pro	Arg	Arg	Ala	Gly	Ala	Phe	Ala	Arg	Ala	Ser	Ala	Glu
		20					25					30			
Ala	Arg	Leu	Cys	Pro	Gln	Pro	Pro	Arg	Asn	Ser	Leu	Pro	Gly	Thr	Val
		35				40					45				
Ser	Ala	Leu	Arg	Ser	Pro	Glu	Gln	Gly	Ser	Glu	Lys	Cys	Pro	Ser	Gln
	50				55					60					
Lys	His	Gly	Thr	Cys	Leu	Ser	Ser	Gly	Lys	Ser	Ser	Lys	Ser	Gly	Trp
65					70				75					80	
Asp	Gln	Gly	Pro	Arg	Asp	Leu	Val								
			85												

<210> 597

<211> 2709

<212> DNA

<213> Homo sapiens

<400> 597

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 aagaaccaca tggtaggagaa gacctacgaa tgtaagaat gcgggaaatc ctttggcgat
 120
 ctctgtctcc ggaggaaaca catgaggatt cacatcgta agaaacccgt ggaatgtcgg
 180
 cagtgcggga agaccttcgg aaaccagtcc atccttaaga ctcacatgaa ctctcacact
 240
 ggagagaaac catacgggtg cgatctctgc gggaaagctt tcagcgcgag ttcaaacctc
 300
 accgcacaca ggaagataca cagcaagag agacgctacg aatgcgcgcg ctgcgggaaa
 360
 gtcttcggtg actattttatc ccggcggagg cacatgagcg ttcaccttgt aaagaaacga
 420
 gttgagtgtg ggcattgtgg caaggccttc aggaaccagt caacgctgaa gacgcacatg
 480
 cgaagccaca cgggggagaa accgtacgaa tgcgatcact gtgggaaggc cttcagcata
 540
 ggctccaacc tgaatgtgca caggcggatc cacaccgggg agaagcccta cgaatgcctt
 600
 gtctgcggga aagccttcag cgaccactca tccctcagga gccacgtgaa aactcaccgg
 660

ggagagaagc tcttttngtg tcatccgtgt ggaaaagcct ccagtgagcg cgccttgcct
720
tagagacaca ggatgattca gaccggaac agacctctgt ggtgtaagag gaagcctctg
780
tgagctcgca ctttactggg tgcaaaagaa tccacggaac ttgggagaag tccagttcct
840
gtaaaaaactg ggaagacgag gcgttctcat cccataggag gtttgtaga actcagccg
900
gggggtgaaa tgtacgtctg tagcatggag aagccttcag gtacattcag ctcttaacaa
960
acacaggaag acttaatggc agcttggcat ttaatgtcaa aatccaagcc gtggcattta
1020
atgtcaaaa gacttcagac cacttctagc cttctgggcc catgagtaat aatgagcaca
1080
ctaggggaca tctctgtaaa cacagtggct ggggaaaccc ttcctagtct cacttgattc
1140
ctcatgacgg aatcacact aaagagagaa atcagtgaag taaggaacgt ggaaggtcat
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gaatggcgcg caaacacgg ccagctgctt gtctttgtat ggcttgccag ctaacaatag
1260
tggttccatc ttaaggaag aagaatgttt gatggagaaa atttgtggcc aatgaagtct
1320
gaaatacttc ctgtcatctg cccctttcca gaaaacttg gccgacctt ggtctacagc
1380
acgggttctc agtcgggcga cgatttggt gtctaggcgt catttgcaa tgtctagaa
1440
catttttggg agttagaatg gggggaagat actcctgact tgtaataaga agacatcaga
1500
gatgctgcta agtcggctcc agcacacagg agccccccac aacgaagagt tagtgcccc
1560
aaacgtcact gttgtgagg ttgaaaataa tcatgcagtc attcctcaat tactgcctgc
1620
agcaattcct ccatttttat gaatcttctg agcacttacg ctaggagaaa tttcttttac
1680
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1740
tcccctcact tgagcatgtg aatattctca cggagagaag cccagcgag attttccggt
1800
gaatacggga ttgcacttac tctttcatca cggaaacaga cccccgaga gaagcccaaa
1860
cgagattttc cgggtaatac gggactgcac gtactctctc atcatgaaa cagagccccg
1920
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1980
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2100
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2160
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2220
tagtgacttc cccggtatcc actctcatct tcttccaata tcaagagaat ccagggtctg
2280

tcagattagtg aagggtgtgct aatctaaatt ttaaaaaatc tcttacaggt tttcttgacg
 2340
 ctgggtaccat ccatgtctca cagccctggc cactgacaga tcagcagatg tcaccacgtg
 2400
 ggctttctgag aaagctcttg aatggggatc gttcttaaac atgaattcct ccctgtatgt
 2460
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 2520
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 2580
 agcgaccctg gcctcccctg tggcctcttt gagtgtctgc agcagccctg gacttcagaa
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 2700
 aaaaaaaaaa
 2709

<210> 598

<211> 240

<212> PRT

<213> Homo sapiens

<400> 598

Xaa	Ala	Cys	Thr	Gln	Cys	Gly	Lys	Ala	Phe	Arg	Trp	Lys	Ser	Asn	Phe
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Asn	Leu	His	Lys	Lys	Asn	His	Met	Val	Glu	Lys	Thr	Tyr	Glu	Cys	Lys
		20					25						30		
Glu	Cys	Gly	Lys	Ser	Phe	Gly	Asp	Leu	Val	Ser	Arg	Arg	Lys	His	Met
		35					40					45			
Arg	Ile	His	Ile	Val	Lys	Lys	Pro	Val	Glu	Cys	Arg	Gln	Cys	Gly	Lys
	50					55					60				
Thr	Phe	Arg	Asn	Gln	Ser	Ile	Leu	Lys	Thr	His	Met	Asn	Ser	His	Thr
65					70					75				80	
Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Asp	Leu	Cys	Gly	Lys	Ala	Phe	Ser	Ala
			85						90					95	
Ser	Ser	Asn	Leu	Thr	Ala	His	Arg	Lys	Ile	His	Thr	Gln	Glu	Arg	Arg
		100						105					110		
Tyr	Glu	Cys	Ala	Ala	Cys	Gly	Lys	Val	Phe	Gly	Asp	Tyr	Leu	Ser	Arg
		115				120					125				
Arg	Arg	His	Met	Ser	Val	His	Leu	Val	Lys	Lys	Arg	Val	Glu	Cys	Arg
		130				135					140				
His	Cys	Gly	Lys	Ala	Phe	Arg	Asn	Gln	Ser	Thr	Leu	Lys	Thr	His	Met
145				150						155				160	
Arg	Ser	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asp	His	Cys	Gly	Lys
			165						170					175	
Ala	Phe	Ser	Ile	Gly	Ser	Asn	Leu	Asn	Val	His	Arg	Arg	Ile	His	Thr
		180						185					190		
Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Leu	Val	Cys	Gly	Lys	Ala	Phe	Ser	Asp
		195				200						205			
His	Ser	Ser	Leu	Arg	Ser	His	Val	Lys	Thr	His	Arg	Gly	Glu	Lys	Leu
210						215					220				
Phe	Xaa	Cys	His	Pro	Cys	Gly	Lys	Gly	Ser	Ser	Glu	Arg	Ala	Xaa	Leu
225					230					235					240

<210> 599
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 599
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 ttccggcgta tggcgacaggt gctaggcgtg gccgtgcacg tgagtctgca ccgctttggc
 120
 caggcatgtt tgccggggccg catcccttgc acttgcagtc cgtggcctat cggccgaggg
 180
 gcaggcctgc agttggagcc gtgcgtgggt gtcccgcgcg aggagcgtgt tggcagacta
 240
 tggggctcgt cggaggacga ggatgtgagt ggcatggct ttgcgcgact gggcgatttc
 300
 caccggcgca tgggtctcca gatcgtccag ggcattgatca
 340

<210> 600
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 600
 Met Pro Trp Thr Ile Trp Ser Thr Ile Ala Gly Trp Asn Thr Pro Ser
 1 5 10 15
 Arg Ala Lys Pro Ser Pro Leu Thr Ser Ser Ser Ser Asp Glu Pro His
 20 25 30
 Ser Leu Pro Thr Arg Ser Ser Arg Gly Thr Pro Thr His Gly Ser Asn
 35 40 45
 Cys Arg Pro Ala Pro Arg Pro Ile Gly His Gly Leu Gln Val Gln Gly
 50 55 60
 Met Arg Pro Gly Lys His Ala Trp Ala Lys Arg Cys Arg Leu Arg Cys
 65 70 75 80
 Thr Ala Thr Pro Ser Thr Cys Ala Met Thr Pro Asn Lys Arg Ser Asp
 85 90 95
 Thr Thr Glu Arg Ser His His Asp Val Lys Ser Arg Glu Ala Arg
 100 105 110

<210> 601
 <211> 421
 <212> DNA
 <213> Homo sapiens

<400> 601
 gccggcgcca gcgacatctc gctcaacgtc ggcggtgcgc gcctgacttc gcgtttttct
 60
 ccgcgcctcca ccattttgat ggacggcgct ccgctggcgg tcgcgcctta cggccagccg
 120
 cagctgtcga tggccccgct gtctatcggt aatctgcaat cgggtggacgt ggtgcgcggc
 180
 ggccggcgcg tgccgtacgg gccgcagaac gtcggcgcgcg tgatcaactt cgttaccgga
 240

gacattccca aaacgttttg cggtgccgcc agcgtacaaa cccagggtgc cagccacggc
 300
 ggcttgaaga ccctgaccag cgcctccgtg ggccggcaccg cagacaacgg cctcggcgcc
 360
 gagctgctct actccggcct gcacggccag ggctaccgcg acaacaacga caacaccgac
 420
 n
 421

<210> 602

<211> 140

<212> PRT

<213> Homo sapiens

<400> 602

Ala	Gly	Gly	Ser	Asp	Ile	Ser	Leu	Asn	Val	Gly	Val	Arg	Gly	Leu	Thr
1				5					10					15	
Ser	Arg	Leu	Ser	Pro	Arg	Ser	Thr	Ile	Leu	Met	Asp	Gly	Val	Pro	Leu
		20						25					30		
Ala	Val	Ala	Pro	Tyr	Gly	Gln	Pro	Gln	Leu	Ser	Met	Ala	Pro	Leu	Ser
		35					40					45			
Ile	Gly	Asn	Leu	Gln	Ser	Val	Asp	Val	Val	Arg	Gly	Gly	Gly	Ala	Val
	50					55				60					
Arg	Tyr	Gly	Pro	Gln	Asn	Val	Gly	Gly	Val	Ile	Asn	Phe	Val	Thr	Arg
	65				70					75				80	
Asp	Ile	Pro	Lys	Thr	Phe	Gly	Gly	Ala	Ala	Ser	Val	Gln	Thr	Gln	Gly
			85					90						95	
Ala	Ser	His	Gly	Gly	Leu	Lys	Thr	Leu	Thr	Ser	Ala	Ser	Val	Gly	Gly
			100					105						110	
Thr	Ala	Asp	Asn	Gly	Leu	Gly	Ala	Glu	Leu	Leu	Tyr	Ser	Gly	Leu	His
		115				120							125		
Gly	Gln	Gly	Tyr	Arg	Asp	Asn	Asn	Asp	Asn	Thr	Asp				
	130					135					140				

<210> 603

<211> 309

<212> DNA

<213> Homo sapiens

<400> 603

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 ttccagcgcc tggccatcgg cggctctgtcg gtggcgagc ccaagcacga gatgatcaag
 120
 gtgctggatt acctgccggg cctgatgccg gctgacaaac ctcgttacct tatggcgctt
 180
 ggcaaacccg aagacctcgt agagggtgtg cgccgcggtg tggacatgtt cgattgcgtg
 240
 atgccaaacc gtaatgcccg caatgggcat ctgttcacg atacaggcgt gctgaagatc
 300
 cgtaacgcg
 309

<210> 604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 604

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Xaa Gly Gly Met His Glu Ser Leu Arg Lys Arg Ser Leu Glu Gly Leu
 1             5             10             15
Asp Lys Ile Gly Phe Asp Gly Leu Ala Ile Gly Gly Leu Ser Val Gly
      20             25             30
Glu Pro Lys His Glu Met Ile Lys Val Leu Asp Tyr Leu Pro Gly Leu
      35             40             45
Met Pro Ala Asp Lys Pro Arg Tyr Leu Met Gly Val Gly Lys Pro Glu
      50             55             60
Asp Leu Val Glu Gly Val Arg Arg Gly Val Asp Met Phe Asp Cys Val
      65             70             75             80
Met Pro Thr Arg Asn Ala Arg Asn Gly His Leu Phe Ile Asp Thr Gly
      85             90             95
Val Leu Lys Ile Arg Asn Ala
      100

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<210> 605

<211> 428

<212> DNA

<213> Homo sapiens

<400> 605

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actggcccaa ggctgggcta tagtcagggt catagtactt ggtgaagtag cgtacgtccg
120
caccacatc acatttcagt accttggcta tcttcaatcg gaaaaaaga ttggagtaaa
180
tggttgagttt tgtaaatggc aacgccgttt gactggaaga gttttggaag gtaatgaccg
240
attccacgtg caaagggtccc catgctacat cctgcgacaa tgaggccggt agcacgttta
300
ttgcctcgct gctttgccga acgccaacct ctgtaccgat acgctgatac tgattgttga
360
tggtataggg ttgcgcagg taggtataat tgggtcaattc gtccatggca atgcgcagtg
420
aagtcttg
428

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<210> 606

<211> 135

<212> PRT

<213> Homo sapiens

<400> 606

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Met Asp Glu Leu Thr Asn Tyr Thr Tyr Leu Ala Gln Ala Tyr Thr Ile
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Asn Asn Gln Tyr Gln Arg Ile Gly Thr Glu Val Gly Val Arg Gln Ser
      20             25             30
Ser Glu Ala Ile Asn Val Leu Thr Ala Ser Leu Ser Gln Asp Val Ala

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```

      35              40              45
Trp Gly Pro Leu His Trp Glu Ser Val Ile Thr Phe Gln Asn Ser Ser
  50              55              60
Ser Gln Thr Ala Leu Pro Leu Pro Lys Leu Asn Ile Tyr Ser Asn Leu
  65              70              75              80
Phe Phe Arg Leu Lys Ile Ala Lys Val Leu Lys Cys Asp Val Gly Ala
      85              90              95
Asp Val Arg Tyr Phe Thr Lys Tyr Tyr Ala Pro Asp Tyr Ser Pro Ala
      100              105              110
Leu Gly Gln Phe Val Val Gln Glu Asn Thr Asp Arg Val Glu Ile Gly
      115              120              125
Asn Tyr Pro Ile Val Asn Ala
      130              135

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<210> 607

<211> 366

<212> DNA

<213> Homo sapiens

<400> 607

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gatcacgatg aattgtgggc gtacacgtac gagaatgtga tggcgctaaa ctgcccgcct
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gacatttgtt gtaaaggatt ctttagaaaa ttggaaaacg tagtgaccgg agtcaatttg
  120
gttttcaacg gcaaacatta tcaaattgta aagaaagagg atgacctatt caaattgacc
  180
aaaagcaatt gttacaagtt gagcaacata aaatttaaca attgaaaata cttgtacttg
  240
acaacgcacg gtgtgtacaa cgtgttcacc aacagctttc attcgagctg tccatttttg
  300
ttgggcacca cgttgccgca gacattcaag aagcccaccg acgaaaagta ttgcccgcag
  360
gacgcg
  366

```

<210> 608

<211> 122

<212> PRT

<213> Homo sapiens

<400> 608

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Asp His Asp Glu Leu Trp Ala Tyr Thr Tyr Glu Asn Val Met Ala Leu
  1              5              10              15
Asn Leu Pro Pro Asp Ile Val Cys Lys Gly Phe Phe Arg Lys Leu Glu
      20              25              30
Asn Val Val Thr Gly Val Asn Leu Val Phe Asn Gly Lys His Tyr Gln
      35              40              45
Ile Val Lys Lys Glu Asp Asp Leu Phe Lys Leu Thr Lys Ser Asn Cys
      50              55              60
Tyr Lys Leu Ser Asn Ile Lys Phe Asn Asn Trp Lys Tyr Leu Tyr Leu
  65              70              75              80
Thr Thr His Gly Val Tyr Asn Val Phe Thr Asn Ser Phe His Ser Ser
      85              90              95
Cys Pro Phe Leu Leu Gly Thr Thr Leu Pro Gln Thr Phe Lys Lys Pro

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```

                100                105                110
Thr Asp Glu Lys Tyr Leu Pro Glu Asp Ala
      115                120

<210> 609
<211> 291
<212> DNA
<213> Homo sapiens

<400> 609
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tgggtcgggtt ggaacgagtc cgtcatgagc ccggtcgcca tggacgactc cagcagtcgg
120
taccacagcct ggaacgagga cccccacgag acggaatcgc cggcttccaa gtcgtcggcc
180
ccgaagcctc aaacttcccc cgccccgtac gcggggccgg ctccgaagac accggccaca
240
cctggaccat ctggggcggg ggcgcgcggc tgggtggggc ggggtggagcc g
291

<210> 610
<211> 69
<212> PRT
<213> Homo sapiens

<400> 610
Met Ser Pro Val Ala Met Asp Asp Ser Ser Ser Pro Tyr Pro Ala Trp
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Lys Gln Asp Pro His Ala Thr Glu Ser Pro Ala Ser Lys Ser Ser Pro
20          25          30
Pro Lys Pro Gln Thr Ser Pro Ala Pro Tyr Ala Gly Pro Ala Pro Lys
35          40          45
Thr Pro Ala Thr Pro Gly Pro Ser Gly Ala Gly Ala Pro Pro Trp Trp
50          55          60
Trp Arg Val Glu Pro
65

<210> 611
<211> 393
<212> DNA
<213> Homo sapiens

<400> 611
nnnatcttgt gtcgatttct ggctgcatac actatggggg agtattgtat aatcgccggg
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tgtaccacaag tagagaggtg ttcatgacca cacagtcagg aagaaaaaaa gcaagcactg
120
acgcgcacatc ggccatcaaa aggtcaggta gcgactcttg agcaagcgct tgatgcagggt
180
gcgaatgtc ctgcaattct tcagcagctt gcggccgctt gtggcgagc caacggattg
240
atggcaacgg ttctggagag ctatctgcgg gaagagtttc ccagtagcga aatcaggagc
300

```

gattcgcaga acaagtccat tgacgagacc atctctatcg tccgctccta tctgcggtag
 360
 aggcaccagg gtgtcctcgg tgagggcaaa ttt
 393

<210> 612
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 612
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 Ile Met Arg Arg Cys Thr Gln Val Glu Arg Cys Ser Met Pro His Ser
 20 25 30
 Pro Glu Glu Lys Lys Gln Ala Leu Thr Arg Ile Arg Arg Ile Lys Gly
 35 40 45
 Gln Val Ala Thr Leu Glu Gln Ala Leu Asp Ala Gly Ala Lys Cys Pro
 50 55 60
 Ala Ile Leu Gln Gln Leu Ala Ala Val Arg Gly Ala Val Asn Gly Leu
 65 70 75 80
 Met Ala Thr Val Leu Glu Ser Tyr Leu Arg Glu Glu Phe Pro Ser Ser
 85 90 95
 Glu Ile Arg Ser Asp Ser Gln Asn Lys Ser Ile Asp Glu Thr Ile Ser
 100 105 110
 Ile Val Arg Ser Tyr Leu Arg
 115

<210> 613
 <211> 567
 <212> DNA
 <213> Homo sapiens

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 420
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<210> 614
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 614
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 Phe Gly Pro Asp Ser Val Glu His Trp Ile Lys Arg Val Glu Lys Ala
 35 40 45
 Ser Glu Phe Ala Val Ser Asn Ala Phe Phe Thr Arg Asn Ser Asp Leu
 50 55 60
 Pro Arg Ser Pro Trp Gly Gln Ile Thr Asp Leu Lys Thr Ser Glu Gln
 65 70 75 80
 Ile Glu Asp His Asp Glu Ile Tyr Ala Glu Ala Gln Glu Leu Val Asn
 85 90 95
 Asp Trp Leu Asp Thr Lys Leu Lys Gln Glu Leu Ala Ser Glu Glu Glu
 100 105 110
 Gly Asp Ala Lys Asn Thr Val Ser Ser Val Thr Ile Met Pro Glu Ala
 115 120 125
 Asn Gly His Leu Lys Tyr Asp Lys Phe Asp Asp Leu Cys Gly Tyr Leu
 130 135 140
 Glu Glu Glu Glu Glu Ser Thr Thr Val Gln Lys Phe Ile Asp His Leu
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 Leu His Lys Asn Val Val Asp Ser Ala Met Met Glu Asp Leu Gly Arg
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 Lys Glu Asn Gln Asp Lys Lys Gln Gln Lys Asp
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 <212> DNA
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 Gly Ala Cys Ala Gly Pro Leu Val Ala Ala Val Ile Leu Asp Asp
 35 40 45
 Arg Arg Ser Gly Arg Ile Ala Gly Leu Ala Asp Ser Lys Thr Leu Ser
 50 55 60
 Ala Ala Lys Arg Glu Ala Leu Phe Asn Val Ile Met Asp Lys Ala Leu
 65 70 75 80
 Ala Val Ser Trp Val Arg Val Glu Ala Asp Glu Cys Asp Arg Leu Gly
 85 90 95
 Met Gln Glu Ala Asp Ile Ser Gly Leu Arg Arg Ala Val Val Arg Leu
 100 105 110
 Gly Val Glu Pro Gly Tyr Val Leu Ser Asp Gly Phe Pro Val Asp Gly
 115 120 125
 Leu Thr Val Pro Asp Leu Gly Met Trp Lys Gly Asp Ser Val Cys Ala
 130 135 140
 Cys Val Ala Ala Ala Ser Ile Val Ala Lys Val Ala Arg Asp Arg Ile
 145 150 155 160
 Met Ile Ala Met Asp Ala Glu Ile Pro Gly Tyr Asp Phe Ala Val His
 165 170 175
 Lys Gly Tyr Ala Thr Ala Leu His Gln Arg Arg Leu Lys Glu Leu Gly
 180 185 190
 Pro Ser Arg Gln His Arg Met Ser Tyr Ala Asn Val Arg Arg Ala Ala
 195 200 205
 Arg Leu His Ser Ser
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 <212> DNA
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<210> 618

<211> 112

<212> PRT

<213> Homo sapiens

<400> 618

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			20				25						30		
Arg	Cys	Arg	Ser	Thr	Thr	Ser	Ser	Ser	Ala	Pro	Thr	Ala	Ser	Ala	Arg
			35				40					45			
Pro	Cys	Ser	Ser	Lys	Thr	Phe	Pro	Ala	Phe	Pro	Glu	Arg	Ile	Leu	Arg
			50			55					60				
Asn	Phe	Asp	Leu	Ser	Gln	Gln	Asp	Ser	Ala	Leu	Val	Ile	Ser	Ser	Ser
65					70					75				80	
Ala	Ala	Thr	Ser	Cys	Gln	Ser	Arg	Trp	Pro	Arg	Ser	Ser	Ser	Val	Ala
				85					90					95	
Ala	Ser	Ala	Ser	Ser	Arg	Ser	Ser	Arg	Trp	Arg	Thr	Arg	Arg	Arg	Arg
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<210> 619

<211> 425

<212> DNA

<213> Homo sapiens

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<210> 620

<211> 137

<212> PRT

<213> Homo sapiens

<400> 620

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      20             25             30
Glu Arg Ala Ser Ile Ala Cys Trp Glu Phe His Leu Ala Ile Glu Lys
      35             40             45
Ser Ile Lys Val Met Ile His Ser Lys Ser Gly Ser Gly Lys His Gly
 50             55             60
His Asn Leu Asp Asp Leu Ile Glu His Leu Ser Lys Phe Glu Ser Gly
65             70             75             80
Ile Asp Ser Ser Gly Leu Ala Gly Leu Pro Ser Asp Lys Asp Ala Ile
      85             90             95
Lys Leu Arg Tyr Ala Glu Met Ile Lys Thr Pro Ile Asp Ala Phe Glu
      100            105            110
Tyr Tyr Leu Ile Ala Ile Arg Phe Val Ala Asp Ile Val Ser Arg Leu
      115            120            125
Glu His Lys Ile Gly Ile Lys Asn Ala
130             135

```

<210> 621

<211> 453

<212> DNA

<213> Homo sapiens

<400> 621

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453

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<210> 622

<211> 151

<212> PRT

<213> Homo sapiens

<400> 622

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```

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      20           25           30
Ala Glu Val Ala Gly Arg Ala Met Val Val Glu Glu Leu Asp Met Phe
      35           40           45
Pro Val Glu Cys Val Val Arg Gly Tyr Leu Thr Gly Ser Gly Trp Ala
      50           55           60
Glu Tyr Gln Arg Asn Gln Ala Val Cys Gly Ile Arg Leu Pro Glu Gly
      65           70           75           80
Leu Gln Asn Gly Ser Arg Leu Glu Glu Pro Ile Phe Thr Pro Ala Ile
      85           90           95
Lys Ala Pro Gln Gly Glu His Asp Glu Asn Ile Asp Tyr Leu Arg Leu
      100          105          110
Val Glu Leu Val Gly Pro Xaa Xaa Ser Ala Gln Leu His Asp Leu Ser
      115          120          125
Leu Arg Val Tyr Gln Arg Ala Glu Glu Ile Ala Arg Lys Arg Gly Ile
      130          135          140
Leu Leu Ala Asp Thr Lys Leu
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<210> 623

<211> 345

<212> DNA

<213> Homo sapiens

<400> 623

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120
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180
tcaacagcat cacctgtgtg tcacccctgt acatcgaaga ttaccacc atagagatcc
240
aggggctggg actgcactgt gtcaggctct gggcgectgg gctgctcgcc ctgtcactgc
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345

```

<210> 624

<211> 111

<212> PRT

<213> Homo sapiens

<400> 624

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Met Ser Thr Glu Asp Met Leu Asp Leu Ser Asn Val Ser Tyr Tyr
      1           5           10           15
Ala Arg Asn Tyr Gln Ala Ala Gln Ser Val Val Ala Lys Phe Asp Ala
      20           25           30
Gly Thr Ile Ala Gln Ala Glu Asp Leu Pro Pro Asp Asp Thr His Thr
      35           40           45
Gly Ala Glu Leu Val Lys Ser Val Val Asn Ser Ile Thr Cys Val Ser
      50           55           60
Pro Leu Tyr Ile Glu Asp Phe Thr Thr Ile Glu Ile Gln Gly Leu Gly

```

```

65              70              75              80
Leu His Cys Val Arg Leu Trp Ala Pro Gly Leu Leu Ala Leu Ser Leu
      85              90              95
Pro Ser Ala Pro Met Arg Ala His Pro Arg Tyr Ala Ala Tyr Gly
      100              105              110

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<210> 625

<211> 339

<212> DNA

<213> Homo sapiens

<400> 625

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339

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<210> 626

<211> 105

<212> PRT

<213> Homo sapiens

<400> 626

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20      25      30
Gln Ala Gly Arg Ala Cys Leu Ser Trp Glu Val Val Gly Trp Val Gly
35      40      45
Ala Gln Cys Lys Gly Arg Gln Thr Cys Trp Ser Leu Gly Tyr Asp Pro
50      55      60
Glu Gln Ser Gly Gly Ala Glu Ser Ser Cys Leu Trp Ala Ser Ile Ala
65      70      75      80
Leu Pro Val Asn Tyr Arg Pro Trp Lys Asn His Leu Cys Ile Gln Gln
85      90      95
Met Ser Ser Ser Ile Met Leu Gly Thr
100      105

```

<210> 627

<211> 10319

<212> DNA

<213> Homo sapiens

<400> 627

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<211> 1294

<212> PRT

<213> Homo sapiens

<400> 628

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Glu	Phe	Ser	Ala	Asp	Gln	Met	Ser	Glu	Asn	Thr	Asp	Gln	Ser	Asp	Ala
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Glu	His	Ser	Leu	His	Val	Gln	Asp	Pro							
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Ser	Ser	Ser	Ser	Lys	Lys	Asp	Leu	Lys	Ser	Ala	Val	Leu	Ser	Glu	Lys
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Phe	Pro	His	Asp	Glu	Val	Thr	Asp	Arg	Asn	Met	Leu	Ala	Phe	Ser	Ser
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Thr	Gly	Gln	Ala	Gln	Ser	Gly	Gln	Ala	Asn	Cys	Gln	Gly	Leu	Ser	Pro
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Ser Lys Asp Phe Gln Lys Val Asn Arg Ser Val Phe Ser Gly Val Leu
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Gln Asp Ile Asn Ser Ser Arg Pro Val Leu Leu Asn Gly Thr Tyr Asp
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Val Gln Val Thr Ser Gly Gly Thr Phe Ile Gly Ile Gly Arg Lys Thr
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Pro Asp Cys Gln Gly Asn Thr Lys Tyr Phe Arg Cys Lys Phe Cys Asn
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Phe Thr Tyr Met Gly Asn Ser Ser Thr Glu Leu Glu Gln His Phe Leu
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Gln Thr His Pro Asn Lys Ile Lys Ala Ser Leu Pro Ser Ser Glu Val
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Lys Ala Gly Asp Thr Pro Val Gly Tyr Ser Val Pro Ile Lys Pro
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Glu Asp Asn Met Val Thr Ser Tyr Asn Cys Gln Phe Cys Asp Phe Arg
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Tyr Ser Lys Ser His Gly Pro Asp Val Ile Val Val Gly Pro Leu Leu
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Arg His Tyr Gln Gln Leu His Asn Ile His Lys Cys Thr Ile Lys His
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Cys Pro Phe Cys Pro Arg Gly Leu Cys Ser Pro Glu Lys His Leu Gly
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Glu Ile Thr Tyr Pro Phe Ala Cys Arg Lys Ser Asn Cys Ser His Cys
595                600                605
Ala Leu Leu Leu Leu His Leu Ser Pro Gly Ala Ala Gly Ser Ser Arg
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Val Lys His Gln Cys His Gln Cys Ser Phe Thr Thr Pro Asp Val Asp
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Val Leu Leu Phe His Tyr Glu Ser Val His Glu Ser Gln Ala Ser Asp
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Val Lys Gln Glu Ala Asn His Leu Gln Gly Ser Asp Gly Gln Gln Ser

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          1170          1175          1180
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Cys Thr Asp Lys Tyr Asp Phe Thr Thr His Ile Gln Arg Gly Leu His
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<210> 629

<211> 411

<212> DNA

<213> Homo sapiens

<400> 629

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<210> 630

<211> 137

<212> PRT

<213> Homo sapiens

<400> 630

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      20           25           30
Leu Val Ala Trp Gly Lys Leu Ser Gly Lys Val Ala Ser Lys Pro Leu
      35           40           45
Thr Leu Pro Gly Arg Asn Trp Ile Asn Leu Gly Leu Leu Val Val Ile
      50           55           60
Ile Ala Cys Gly Ile Trp Phe Ser Asn Val Ser Gly Gly Ile Ala Trp
      65           70           75           80
Leu Pro Leu Ala Leu Leu Thr Leu Ala Ser Leu Phe Leu Gly Phe His
      85           90           95
Phe Val Ala Ala Ile Gly Gly Ala Asp Met Pro Val Val Ile Ser Met
      100          105          110
Leu Asn Ser Tyr Ser Gly Trp Ala Ala Ala Phe Ser Gly Phe Ser Leu
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His Ile Pro Val Leu Ile Val Thr Gly
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<210> 631

<211> 275

<212> DNA

<213> Homo sapiens

<400> 631

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<210> 632

<211> 87

<212> PRT

<213> Homo sapiens

<400> 632

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      20           25           30
Lys Glu Ala Leu Leu Ile Leu Ser Lys Glu Leu Asp Thr Cys Gln Gln
      35           40           45
Glu Arg Asp Gln Tyr Lys Leu Met Ala Asn Gln Leu Arg Glu Arg His
      50           55           60
Gln Ser Leu Lys Lys Lys Tyr Arg Glu Leu Ile Asp Gly Asp Pro Ser
      65           70           75           80
Leu Pro Pro Glu Lys Arg Lys
      85

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<210> 633

<211> 420

<212> DNA

<213> Homo sapiens

<400> 633

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300
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<210> 634

<211> 107

<212> PRT

<213> Homo sapiens

<400> 634

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20          25          30
Val Asp Ala Val Val Asn Ala Val Glu His Tyr Ser Glu Leu Thr Pro
35          40          45
Gln Leu Leu Thr Thr Gly Gly Thr Ser Asp Gly Arg Phe Ile Ala Gln
50          55          60
Met Gly Xaa Gln Val Val Glu Leu Gly Pro Val Asn Ala Thr Ile His
65          70          75          80
Lys Val Asn Glu Cys Val His Ala Ala Asp Leu Gln Leu Leu Ser Arg
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<210> 635

<211> 6918

<212> DNA

<213> Homo sapiens

<400> 635

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180

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<211> 619

<212> PRT

<213> Homo sapiens

<400> 636

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			20					25					30		
Tyr	Leu	Leu	Asp	Val	Val	Asp	Ser	Glu	Glu	Gln	Asp	Met	Ala	Leu	Asn
		35					40					45			
Ile	His	Ala	Phe	Ser	Ala	Gly	Leu	Gly	Gly	Ala	Ile	Gly	Tyr	Val	Leu
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Gly	Gly	Leu	Asp	Trp	Thr	Gln	Thr	Phe	Leu	Gly	Ser	Trp	Phe	Arg	Thr
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Val	Ala	Leu	His	Leu	Phe	Ser	Ile	Asp	Glu	Glu	Gln	Tyr	Ser	Pro	Gln
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Gln	Glu	Arg	Ser	Ala	Glu	Glu	Pro	Gly	Ala	Leu	Asp	Gly	Gly	Glu	Pro
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His	Gly	Val	Pro	Ala	Phe	Pro	Asp	Glu	Val	Gln	Ser	Glu	His	Glu	Leu
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Ala	Leu	Asp	Tyr	Pro	Asp	Val	Asp	Ile	Met	Arg	Ser	Lys	Ser	Asp	Ser
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Ala	Leu	His	Val	Pro	Asp	Thr	Ala	Leu	Asp	Leu	Glu	Pro	Glu	Leu	Leu
			165						170					175	
Phe	Leu	His	Asp	Ile	Glu	Pro	Ser	Ile	Phe	His	Asp	Ala	Ser	Tyr	Pro
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Ala	Thr	Pro	Arg	Ser	Thr	Ser	Gln	Glu	Leu	Ala	Lys	Thr	Lys	Leu	Pro
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Pro	Thr	Lys	Asp	Ala	Leu	Gly	Gly	Tyr	Thr	Arg	Val	Asp	Thr	Lys	Pro
			245						250					255	
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		260						265					270		
Gln	Ala	Ser	Ser	Thr	Phe	Ser	Tyr	Tyr	Gly	Lys	Leu	Gly	Ser	His	Cys
		275					280					285			
Tyr	Arg	Tyr	Arg	Arg	Ala	Asn	Ala	Val	Val	Leu	Ile	Lys	Pro	Ser	Arg

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 Ser Met Ser Asp Leu Tyr Asp Met Gln Lys Arg Gln Arg Gln His Arg
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 Val Ile Pro Met Val Ala Ser Val Gly Ser Phe Leu Gly Phe Leu Thr
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 Glu Gln Lys Gly Leu Ser Ser Pro Leu Ala Gly Glu Gly Arg Ala Gly
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<210> 637

<211> 370

<212> DNA

<213> Homo sapiens

<400> 637

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<210> 638

<211> 99

<212> PRT

<213> Homo sapiens

<400> 638

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			20					25					30		
Pro	Trp	Cys	Phe	Cys	Arg	Pro	Leu	Leu	Phe	Phe	Gly	Met	Val	Arg	Phe
		35					40					45			
Ile	Ala	Ile	Pro	Val	Phe	Leu	Thr	Val	Pro	Asn	Ile	Ile	Asn	Ile	Gly
	50					55				60					
Ile	Gln	Ala	Ala	Val	Val	Ala	Ile	Met	Ala	Phe	Gly	Met	Thr	Phe	Val
	65					70				75				80	
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Ser Ala Met

<210> 639

<211> 330

<212> DNA

<213> Homo sapiens

<400> 639

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<210> 640

<211> 110

<212> PRT

<213> Homo sapiens

<400> 640

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Gly Asp Ile Ile Pro Arg Phe Val Glu Ala Gly Asp Ala Gln Val Tyr
 35           40           45
Asp Phe Cys Asp Asn Gln Val Pro Gly Thr Thr Glu Lys Asp Arg Asp
 50           55           60
Tyr Trp Arg Asp Val Gly Thr Ile Asp Ala Tyr His Asp Ala His Met
 65           70           75           80
Asp Leu Val Ser Val Glu Pro Glu Phe Asn Leu Tyr Asn Pro Asp Trp
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<210> 641

<211> 491

<212> DNA

<213> Homo sapiens

<400> 641

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<210> 642

<211> 163

<212> PRT

<213> Homo sapiens

<400> 642

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Pro Asn Thr Val Ser Asn Ser Ile Gly Asp Ile His Arg Asn Lys Arg
 35           40           45
Lys Val Phe Ser Lys Ile Phe Ser His Glu Ala Leu Glu Ser Tyr Leu

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His Pro Glu Ala Ile Asn Val Tyr Gln Glu Ala Gln Lys Leu Thr Phe
      85      90      95
Arg Met Ala Ile Arg Val Leu Leu Gly Phe Ser Ile Pro Glu Glu Asp
      100      105      110
Leu Gly His Leu Phe Glu Val Tyr Gln Gln Phe Val Asp Asn Val Phe
      115      120      125
Ser Leu Pro Val Asp Leu Pro Phe Ser Gly Tyr Arg Arg Gly Ile Gln
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Ala Arg Gln Ile Leu Gln Lys Gly Leu Glu Lys Ala Ile Arg Glu Lys
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Leu Gln Cys

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<210> 643

<211> 628

<212> DNA

<213> Homo sapiens

<400> 643

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<210> 644

<211> 209

<212> PRT

<213> Homo sapiens

<400> 644

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Ala Glu Gln Asp Ala Ile Thr Leu Arg Glu Gly Gln Tyr Val Glu Val

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Leu	Asp	Ala	His	Pro	Leu
	35		40		45
Lys	Ser	Ser	Pro	Ser	Arg
	50		55		60
Arg	Arg	Leu	Lys	Leu	Ser
	65		70		75
Phe	Pro	Gly	Glu	Ala	Val
	85		90		95
Ser	Val	Ile	Gln	Glu	Leu
	100		105		110
Leu	Gln	Phe	Leu	Gln	Ser
	115		120		125
His	Val	Pro	Ile	Ala	Val
	130		135		140
Val	Arg	Asp	Ile	Gly	Arg
	145		150		155
Gln	Cys	Asp	Thr	Asp	Asp
	165		170		175
Ala	Ala	Phe	Glu	Gln	Tyr
	180		185		190
Glu	Ser	Val	Val	Val	Ser
	195		200		205

Ala

<210> 645

<211> 417

<212> DNA

<213> Homo sapiens

<400> 645

atccataggc attgccagag tattcacttc ctgttgagg caccagggg agaggcctgt
60
gaggggaagg gcatcaatgc agggctgggg tgtgggaagg tctgcagggc tggcaatggg
120
caagctcagg aatggtgggg gagacagttg gagccacggc agggacaatg gagctcagaa
180
ggtccctctg tcattcccttt tggaacccat tgatctggaa aatttggggc agtgccttt
240
tccgtaggta ctggaggcac tggcttgaca tactacagcc ctcccaggag gcccaagaag
300
tagatgttat aactaccccc attttccaga tgaagaaact gaggctctgg gatctgcgga
360
agctcccaga gctggagcag ttagtccctg ggccttacac tcacagcaca gtttccc
417

<210> 646

<211> 95

<212> PRT

<213> Homo sapiens

<400> 646

Met Val Gly Glu Thr Val Gly Ala Thr Ala Gly Thr Met Glu Leu Arg

```

1           5           10           15
Arg Ser Leu Cys His Pro Phe Trp Asn Pro Leu Ile Trp Lys Ile Trp
           20           25           30
Gly Ser Val Leu Phe Arg Arg Tyr Trp Arg His Trp Leu Asp Ile Leu
           35           40           45
Gln Pro Ser Gln Glu Ala Gln Lys Val Asp Val Ile Thr Thr Pro Ile
           50           55           60
Phe Gln Met Lys Lys Leu Ser Leu Trp Asp Leu Arg Lys Leu Pro Glu
65           70           75           80
Leu Glu Gln Leu Val Pro Gly Pro Tyr Thr His Ser Thr Val Ser
           85           90           95

```

<210> 647

<211> 421

<212> DNA

<213> Homo sapiens

<400> 647

```

acgcgtttcg gttcttgagc gcttccacca attcagcggg ggtgagcggc ccctgtgcat
60
cgcgagcagc ggtgatcaga taggcgatat ccgcctcggt cagttgcacg gtgtcgttat
120
cggtagccat gcgtggcgaa ctcttttgcc atgggaaaaa cgggtgaggg caacgggcac
180
agcaacagga cgtgtccctt gcggcacgtg gcaacacgtc agtatagcgc gtttccgccg
240
gggatttccgt tgaatgaagg caagaagtcg ggacgcgcat caccctgctac cgctcggtgg
300
tacgatagcc gcggcgccac caggttggtc acattccaaa cgcaacgcag gaaccgcgat
360
gaacagcggt tttcgcaaca aaccccttat gacgctggct ctcgggcatt tcagtgtcga
420
c
421

```

<210> 648

<211> 90

<212> PRT

<213> Homo sapiens

<400> 648

```

Met Gly Lys Ser Gly Glu Ala Asn Gly His Ser Asn Arg Thr Cys Pro
1           5           10           15
Leu Arg His Val Ala Thr Arg Gln Tyr Ser Ala Phe Pro Pro Gly Phe
           20           25           30
Pro Leu Asn Glu Gly Lys Lys Ser Gly Thr His Pro Pro Ala Thr Ala
           35           40           45
Arg Trp Tyr Asp Ser Arg Gly Ala Thr Arg Leu Ala Thr Phe Gln Thr
           50           55           60
Gln Arg Arg Asn Pro His Glu Gln Arg Phe Ser Gln Gln Thr Pro Tyr
65           70           75           80
Asp Ala Gly Ser Arg Ala Phe Gln Cys Arg
           85           90

```

<210> 649
 <211> 563
 <212> DNA
 <213> Homo sapiens

<400> 649
 cgcaacatgc ataaacacat gtgctcctcc gagactcagc tacttccctt gccctctctg
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 gacctcagtg tccaggcttg tgcatttagg ggctcagggt tgggctctgt gcctatgagc
 120
 cagttctatgt gtgcactgtc tgtctgtctg tccgtctgcc agcaaccttc aaggccccag
 180
 gaggggaagg caccaatgga aggtgggggc aggggaaggag gtacgcttga caagttccaa
 240
 tgtctggctt tccctcctgg aaaccccgag ctggggctgg ccccccttc ccttctctgc
 300
 tctctcgctc aagcacgtcc ettctaagag cccctctctg cagacgcccc cagtggaaac
 360
 aagcctagat tcgctgccaa gaaggccgac attttttaga cttgccagct taaaggggac
 420
 tgcacaggca cgcactcaaa tccccccctc catgtcctcc gctgtgacac attcaggcaa
 480
 cccgaaacac acaaagacac ggttgacac agcggccacc tgtgcacaca ggaggttagc
 540
 catggagcgc atctgacccc ggg
 563

<210> 650
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 650
 Met His Lys His Met Cys Ser Ser Glu Thr Gln Leu Leu Pro Leu Pro
 1 5 10 15
 Ser Leu Asp Leu Ser Val Gln Ala Cys Ala Phe Arg Gly Ser Gly Leu
 20 25 30
 Gly Ser Val Pro Met Ser Gln Ser Met Cys Ala Leu Ser Val Cys Leu
 35 40 45
 Ser Val Cys Gln Gln Pro Ser Arg Pro Gln Glu Gly Lys Ala Pro Met
 50 55 60
 Glu Gly Gly Gly Arg Glu Gly Gly Ser Val Asp Lys Phe Gln Cys Leu
 65 70 75 80
 Ala Phe Pro Pro Gly Asn Pro Glu Leu Gly Leu Ala Pro Pro Ser Leu
 85 90 95
 Pro Val Ser Leu Ala Gln Ala Arg Pro Phe
 100 105

<210> 651
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 651

gaattcttca acaagctctc ctgctctagg atcaaggata gacctataca aggtccaaac
 60
 cataatggag tccatggggt caaagttatc tccaggagct cagcagttga tggatatggg
 120
 taggtgtcag cagcggaatt gtattcccat tggagagcag cttcagtcgg tgttgggcaa
 180
 ttctggatgc aagcatatga ttggactaca atcctcatct accttaggaa ccttaaaaca
 240
 gtgcgtctcc acaccttttc cttttagaac tggattgaca tctgggaacg tgactgaaaa
 300
 cttacaagcg tacattgata aaagtacaca actgcctggt ggagagaatt c
 351

<210> 652

<211> 95

<212> PRT

<213> Homo sapiens

<400> 652

Met	Glu	Ser	Met	Gly	Ser	Lys	Leu	Ser	Pro	Gly	Ala	Gln	Gln	Leu	Met
1			5					10						15	
Asp	Met	Val	Arg	Cys	Gln	Gln	Arg	Asn	Cys	Ile	Pro	Ile	Gly	Glu	Gln
		20						25					30		
Leu	Gln	Ser	Val	Leu	Gly	Asn	Ser	Gly	Tyr	Lys	His	Met	Ile	Gly	Leu
		35				40						45			
Gln	Ser	Ser	Ser	Thr	Leu	Gly	Thr	Leu	Asn	Lys	Ser	Ser	Ser	Thr	Pro
	50				55					60					
Phe	Pro	Phe	Arg	Thr	Gly	Leu	Thr	Ser	Gly	Asn	Val	Thr	Glu	Asn	Leu
65			70					75						80	
Gln	Ala	Tyr	Ile	Asp	Lys	Ser	Thr	Gln	Leu	Pro	Gly	Gly	Glu	Asn	
		85						90					95		

<210> 653

<211> 399

<212> DNA

<213> Homo sapiens

<400> 653

nncccgggtg gggctggggt ggggccagca tcagaggagg acatgaccaa gctgtgcaac
 60
 caccggcgga aagctgttgc tatggcaact ctgtaccgca gcatggagac cacctgctca
 120
 cactcttctc ctggagaggg agcgagcccc caaatgttcc aactgtgtgc ccagggcccc
 180
 cctctgtccc gccctccctg tcgagttcct cctacaactc cacttaattg gggctctggc
 240
 tcccttcccc cagaaccacc ctcagtttcc caggccttcc cactctagc aggccctggg
 300
 gggettttcc ccccaaggct tgctgaccca gtcccttctg ggggcagtag cagccccgct
 360
 ttccctccaa ggggcaatgc cccctctcca gccccacct
 399

<210> 654

<211> 133

<212> PRT

<213> Homo sapiens

<400> 654

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Xaa Pro Gly Gly Ala Gly Val Gly Pro Ala Ser Glu Glu Asp Met Thr
 1           5           10           15
Lys Leu Cys Asn His Arg Arg Lys Ala Val Ala Met Ala Thr Leu Tyr
      20           25           30
Arg Ser Met Glu Thr Thr Cys Ser His Ser Ser Pro Gly Glu Gly Ala
      35           40           45
Ser Pro Gln Met Phe His Thr Val Ser Pro Gly Pro Pro Ser Ala Arg
      50           55           60
Pro Pro Cys Arg Val Pro Pro Thr Thr Pro Leu Asn Gly Gly Pro Gly
 65           70           75           80
Ser Leu Pro Pro Glu Pro Pro Ser Val Ser Gln Ala Phe Pro Thr Leu
      85           90           95
Ala Gly Pro Gly Gly Leu Phe Pro Pro Arg Leu Ala Asp Pro Val Pro
      100          105          110
Ser Gly Gly Ser Ser Ser Pro Arg Phe Leu Pro Arg Gly Asn Ala Pro
      115          120          125
Ser Pro Ala Pro Pro
      130

```

<210> 655

<211> 368

<212> DNA

<213> Homo sapiens

<400> 655

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tgaaggaaat tctctatggc ttgtgttcat catgtagaac agcccatgag gagaatagga
 60
gatgagggtgg gaagtgcact gggatctggg ggaagaagcc cgggggttcaa gactcagcta
 120
ctgactgcat ggtgtcaaaag gattcgggca tcctctctga ggctgagtct tcagatgaca
 180
gtgagaacag ggacacctgc cctgcccttc tcacggggcg tgtgggcacc catgagcatg
 240
cttgacaaat gcaaggtgcc atacaaacag gaaactgcaca atctcaccgc cgggcactact
 300
cagcattgtt atttttacct ttacatctat atgaagatgt agttccattc cttttaactg
 360
ttgttttc
 368

```

<210> 656

<211> 108

<212> PRT

<213> Homo sapiens

<400> 656

```

Met Ala Cys Val His His Val Glu Gln Pro Met Arg Arg Ile Gly Asp
 1           5           10           15
Glu Val Gly Ser Ala Leu Gly Ser Gly Gly Arg Ser Pro Gly Phe Lys

```

```

                20                25                30
Thr  Gln  Leu  Leu  Thr  Ala  Trp  Cys  Gln  Arg  Ile  Arg  Ala  Ser  Ser  Leu
      35                40                45
Arg  Leu  Ser  Leu  Gln  Met  Thr  Val  Arg  Thr  Gly  Thr  Pro  Ala  Leu  Pro
      50                55                60
Phe  Ser  Arg  Gly  Val  Trp  Ala  Pro  Met  Ser  Met  Leu  Asp  Lys  Cys  Lys
      65                70                75                80
Val  Pro  Tyr  Lys  Gln  Glu  Leu  His  Asn  Leu  Thr  Ala  Arg  Pro  Thr  Gln
      85                90                95
His  Cys  Tyr  Phe  Tyr  Leu  Tyr  Ile  Tyr  Met  Lys  Met
      100                105

```

<210> 657

<211> 330

<212> DNA

<213> Homo sapiens

<400> 657

```

gtcgaccacg gcatgaaaaa gccgggggatg atcctcatca acaacccttg gggcgagtgcc
60
aacgaggcg gcttcaagcg cgccctcgaa gagcgtggca tggccaacgc cggtgtcgag
120
cgtatttcagg acagcgacct ggacgtgggt ccgcaattga ccccgctcta aaaacgccgg
180
tgccgacacc ttgctgatgg tcggcaacgt cgccctctcg gcacaggtgg tcaagtcctt
240
ggaccgcatg ggttgggacg tgcctgtggt gtctcactgg gggccggccg gnggtcgctt
300
tggcgagctg gcggggccta acgcttctcg
330

```

<210> 658

<211> 102

<212> PRT

<213> Homo sapiens

<400> 658

```

Met  Lys  Lys  Pro  Gly  Met  Ile  Leu  Ile  Asn  Asn  Pro  Trp  Gly  Glu  Ser
      1                5                10                15
Asn  Glu  Ala  Gly  Phe  Lys  Arg  Ala  Leu  Glu  Glu  Arg  Gly  Met  Ala  Asn
      20                25                30
Ala  Gly  Val  Glu  Arg  Ile  Gln  Asp  Ser  Asp  Leu  Asp  Val  Val  Pro  Gln
      35                40                45
Leu  Thr  Pro  Pro  Glu  Lys  Arg  Arg  Cys  Arg  His  Leu  Ala  Asp  Gly  Arg
      50                55                60
Gln  Arg  Arg  Pro  Phe  Gly  Thr  Gly  Gly  Gln  Val  Pro  Gly  Pro  His  Gly
      65                70                75                80
Leu  Gly  Arg  Ala  Cys  Gly  Val  Ser  Leu  Gly  Ala  Gly  Arg  Xaa  Ser  Leu
      85                90                95
Trp  Arg  Ala  Gly  Gly  Ala
      100

```

<210> 659

<211> 1505

<212> DNA

<213> Homo sapiens

<400> 659

gccaggatca tgtccaccac cacatgccaa gtggtggcgt tcctcctgtc catcctgggg
60
ctggccggct gcatcgccgc caccgggatg gacatgtgga gaccccagga cctgtacgac
120
aaccccgcta cctccgtggt ccagtagcaa gggctctgga ggagctgcgt gaggcagagt
180
tcaggcttca ccgaatgcag gccctatttc accatcctgg gacttcacgc catgctgcag
240
gcagtgcgag ccctgatgat cgtaggcatc gtctctgggt ccatggcct cctggtatcc
300
atcttttccc tgaaatgcat ccgcattggc agcatggagg actctgccaa agccaacatg
360
acactgacct cgggatcat gttcattgtc tcaggctctt gtgcaattgc tggagtgtct
420
gtgtttgcc aatgctggt gactaacttc tggatgtcca cagtaacat gtacaccggc
480
atgggtggga tgggtgcagac tgttcagacc aggtacacat ttggtgcggc tctgttcgtg
540
ggctgggtcg ctggaggcct cactactaatt gggggtgtga tgatgtgcat cgcctgccgg
600
ggcctggcac cagaagaac caactacaaa gccgtttctt atcatgcctc agggcacagt
660
gttgcttaca agcctggagg cttcaaggcc agcactggct ttgggtccaa caccaaaaac
720
aagaagatat acgatggagg tgcccgcaca gaggacgagg tacaatctta tccttccaag
780
cacgactatg tgtaatgctc taagacctct cagcacgggc ggaagaaact cccggagagc
840
tcacccaaaa aacaaggaga tccatctag atttcttctt gcttttgact cacagctgga
900
agtttagaaa gcctcgattt catctttgga gaggccaaagt ggtcttaggc tcagtctctg
960
tctctaaata ttccaccata aaacagctga gttatttatg aattagaagc tatagctcac
1020
attttcaatc ctctatttct ttttttaaat ataactttct actctgatga gagaatgtgg
1080
tttttaatct tctctcatat ttgatgatt tagacagact cccctcttc ctctagtca
1140
ataaacccat tgatgatcta ttcccagct tatccccaa gaaacttttg aaaggaaaga
1200
gtagacccea agatgttatt ttctgctggt tgaattttgt ctccccacc ccaactggc
1260
tagtaataaa cacttactga agaagaagca ataagagaaa gatatttgta atctctccag
1320
cccatgatct cggttttctt acactgtgat cttaaaagt accaaaacca agtcattttc
1380
agtttgaggc aaccaaacct ttctactgct gttgacatct tcttattaca gcaacacct
1440
tctaggagtt tctgagctc tccactggag tctctccctt ctgtcgtctt ctgcgacggg
1500

tacccc
1505

<210> 660
<211> 261
<212> PRT
<213> Homo sapiens

<400> 660
Met Ser Thr Thr Cys Gln Val Val Ala Phe Leu Leu Ser Ile Leu
1 5 10 15
Gly Leu Ala Gly Cys Ile Ala Ala Thr Gly Met Asp Met Trp Ser Thr
20 25 30
Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln Tyr Glu Gly
35 40 45
Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe Thr Glu Cys Arg
50 55 60
Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met Leu Gln Ala Val Arg
65 70 75 80
Ala Leu Met Ile Val Gly Ile Val Leu Gly Ala Ile Gly Leu Leu Val
85 90 95
Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Glu Asp Ser
100 105 110
Ala Lys Ala Asn Met Thr Leu Thr Ser Gly Ile Met Phe Ile Val Ser
115 120 125
Gly Leu Cys Ala Ile Ala Gly Val Ser Val Phe Ala Asn Met Leu Val
130 135 140
Thr Asn Phe Trp Met Ser Thr Ala Asn Met Tyr Thr Gly Met Gly Gly
145 150 155 160
Met Val Gln Thr Val Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe
165 170 175
Val Gly Trp Val Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met
180 185 190
Cys Ile Ala Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala
195 200 205
Val Ser Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly
210 215 220
Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
225 230 235 240
Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro Ser
245 250 255
Lys His Asp Tyr Val
260

<210> 661
<211> 451
<212> DNA
<213> Homo sapiens

<400> 661
nnacgcgtgt agtttgtgta tcggcgcgga actcgccgcg tctgatctcg aggagcttcc
60
cccatggacg agattttaac cttgcttgcc ggaggcggtg acgacgagcc agagtggcat
120

gacaaggcat tatgtgcccga gactgatccg gaggcattct tccctgaaaa ggggtgatcc
 180
 acccgtgagg ccaagcgcac ctgtgagtc tgtgaggtcc gccaggagtg cttggagtag
 240
 gcccttcgca atgacgagag gttcggaaatc tggggcgcat tgtccgagat ggagaggcgt
 300
 cggctgcgca agcgggcggt acctgacgtc ggagcgcggt tattgacacg gcccggtaaa
 360
 atgcccctgtc tgcccgggat ggctgtctgc acgatgcggc atatgcgagat atcgacagacg
 420
 tgggtgtgcat cccgtgctcc atgacgtcga c
 451

<210> 662

<211> 85

<212> PRT

<213> Homo sapiens

<400> 662

Met	Asp	Glu	Ile	Leu	Thr	Leu	Leu	Ala	Gly	Gly	Gly	Asp	Asp	Glu	Pro
1				5					10					15	
Glu	Trp	His	Asp	Lys	Ala	Leu	Cys	Ala	Gln	Thr	Asp	Pro	Glu	Ala	Phe
				20				25					30		
Phe	Pro	Glu	Lys	Gly	Gly	Ser	Thr	Arg	Glu	Ala	Lys	Arg	Ile	Cys	Glu
				35				40					45		
Ser	Cys	Glu	Val	Arg	Gln	Glu	Cys	Leu	Glu	Tyr	Ala	Leu	Ala	Asn	Asp
				50			55					60			
Glu	Arg	Phe	Gly	Ile	Trp	Gly	Gly	Leu	Ser	Glu	Met	Glu	Arg	Arg	Arg
65					70					75				80	
Leu	Arg	Lys	Arg	Ala											
				85											

<210> 663

<211> 552

<212> DNA

<213> Homo sapiens

<400> 663

ctcagcgtc tcgacgcgca cgccgcccag ggagccaagg aagacctctc gcagcgcgac
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 ccctacgacg tgctcgtcgt agggcggggt cccgcgggtg ccgcggccgc cgtgtacgcg
 120
 gctcgaagg gcattcgac cgccatggtc gggctctcga tcggcgccca ggtactcgat
 180
 accgaggcca tcgacaacct catctcgggt ccgcacacca ccggtccgcg tctggccgac
 240
 gccctccgca gccacgtcaa cgactacaac attgacgtta ttgagcgtca gaccgccagc
 300
 gccatagaga ccaccggcgg tatgaccacc gtgcatctga ccgacggcga cctgccccgg
 360
 cgctcagtc tcgtggccac cgggtgccgc tggcgcaacc ttggcgtagc tggcgaggag
 420
 gaataccgca ccaagggtgt gacctactgc ccgcaactgc atggcccgtc attcacaggc
 480

aaaaagggtgg ccgtcgtcgg aggtggaac tccggtattg aggcgcgtat cgacctcgcc
 540
 ggcgtcgtcg ac
 552

<210> 664
 <211> 184
 <212> PRT
 <213> Homo sapiens

<400> 664
 Leu Glu Arg Leu Asp Ala Asp Ala Ala Gln Gly Ala Lys Glu Asp Leu
 1 5 10 15
 Ser Gln Arg Asp Pro Tyr Asp Val Leu Val Val Gly Ala Gly Pro Ala
 20 25 30
 Gly Ala Ala Ala Val Tyr Ala Ala Arg Lys Gly Ile Arg Thr Ala
 35 40 45
 Met Val Gly Ser Arg Ile Gly Gly Gln Val Leu Asp Thr Glu Ala Ile
 50 55 60
 Asp Asn Leu Ile Ser Val Pro His Thr Thr Gly Pro Arg Leu Ala Asp
 65 70 75 80
 Ala Leu Arg Ser His Val Asn Asp Tyr Asn Ile Asp Val Ile Glu Arg
 85 90 95
 Gln Thr Ala Ser Ala Ile Glu Thr Thr Gly Gly Met Thr Thr Val His
 100 105 110
 Leu Thr Asp Gly Asp Leu Arg Ala Arg Ser Val Ile Val Ala Thr Gly
 115 120 125
 Ala Arg Trp Arg Asn Leu Gly Val Pro Gly Glu Glu Glu Tyr Arg Thr
 130 135 140
 Lys Gly Val Thr Tyr Cys Pro His Cys Asp Gly Pro Leu Phe Thr Gly
 145 150 155 160
 Lys Lys Val Ala Val Val Gly Gly Gly Asn Ser Gly Ile Glu Ala Ala
 165 170 175
 Ile Asp Leu Ala Gly Val Val Asp
 180

<210> 665
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 665
 acgcgtacag ttcgccgtcg aggttgaaca ccacgatcgg tgtaccggtc acttcgtcga
 60
 acacgctctt catttcgccc ggcagcagtt cggcgccggc gcagacaaa gtcaggcct
 120
 cgctcacgcg gtggccccgg ccacgggctt ttccaggatc tcgaaacgca ggtcgtcgcg
 180
 cttgggggatg ccgaatcggt cgtegccata cgggaacggc ttcttgatgc cggtgccgag
 240
 gtaccccgcg cgctcgtaga agcgcacaga tcgcgcgcac gtcgatcact gtcattctga
 300
 ttaccggcac gttccattcg gcgcgggcgt gggcttcggc ggcgtccatc aa
 352

<210> 666
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 666
 Met Glu Arg Ala Gly Asn Ala Asp Asp Ser Asp Arg Arg Ala Arg Asp
 1 5 10 15
 Leu Ile Ala Ser Thr Ser Ala Ala Ala Thr Cys Ala Pro Ala Ser Arg
 20 25 30
 Ser Arg Ser Arg Met Ala Thr Asn Asp Ser Ala Ser Pro Ser Ala Thr
 35 40 45
 Thr Cys Val Ser Arg Ser Trp Lys Ser Arg Trp Pro Gly Pro Pro Arg
 50 55 60
 Glu Arg Gly Leu Asp Leu Cys Leu Arg Arg Arg Arg Thr Ala Ala Gly
 65 70 75 80
 Arg Asn Glu Glu Arg Val Arg Arg Ser Asp Arg Tyr Thr Asp Arg Gly
 85 90 95
 Val Gln Pro Arg Arg Arg Thr Val Arg
 100 105

<210> 667
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 667
 nacgctacg aatcggtgtt gcgtcgcaac ccaggggagg ccgagttcca ccaggctgtg
 60
 cgggagatct ttgaatctct cggcccggtg ctgcacaaga atccgcagta cgtggaggca
 120
 gccgtgttgt cgcgcactct cgaaccggaa cgccagatca ttttccgggt gccgtgggtt
 180
 gacgacgagg gcaagatccg tatcaaccgt ggcttccgcg ttgaatatct gtcggtactg
 240
 gggccgtata aggggtggatt gcgattccac cctcgggtgt acttaggaac gattaagttc
 300
 cttggttttg agcagatctt caaaaatgct ctgactggca tgccgatcgg tggcgcsaag
 360
 ggtgggtcgg actttgatcc ccatgacgcg t
 391

<210> 668
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 668
 Xaa Ala Tyr Glu Ser Val Leu Arg Arg Asn Pro Gly Glu Ala Glu Phe
 1 5 10 15
 His Gln Ala Val Arg Glu Ile Phe Glu Ser Leu Gly Pro Val Leu Asp
 20 25 30
 Lys Asn Pro Gln Tyr Val Glu Ala Ala Val Leu Ser Arg Ile Cys Glu

```

      35              40              45
Pro Glu Arg Gln Ile Ile Phe Arg Val Pro Trp Val Asp Asp Glu Gly
   50              55              60
Lys Ile Arg Ile Asn Arg Gly Phe Arg Val Glu Tyr Ser Ser Val Leu
   65              70              75              80
Gly Pro Tyr Lys Gly Gly Leu Arg Phe His Pro Ser Val Tyr Leu Gly
      85              90              95
Thr Ile Lys Phe Leu Gly Phe Glu Gln Ile Phe Lys Asn Ala Leu Thr
      100              105              110
Gly Met Pro Ile Gly Gly Ala Lys Gly Gly Ser Asp Phe Asp Pro His
      115              120              125
Asp Ala
      130

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<210> 669

<211> 707

<212> DNA

<213> Homo sapiens

<400> 669

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<210> 670

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<213> Homo sapiens

<400> 670

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Thr Glu Ser Gly Gly Val Ile Ala Ala Met Pro Trp His Lys Val Lys
   50                55                60
Gln Ala Lys Val Gly Gly Glu Pro Ile Pro Thr Leu Asp Glu Ile Phe
   65                70                75                80
Asp Ala Phe Pro Asp Ala Phe Ile Asn Ile Asp Ile Lys His Asp Gly
   85                90                95
Ala Thr Met Pro Leu Ile Asp Val Leu Ser Arg His Arg Ala Trp Ser
  100                105                110
Arg Val Cys Val Gly Ser Phe Ser Ser Lys Arg Ile Gln Thr Phe Arg
  115                120                125
Arg Leu Val Gln Gly Arg Thr Ala Thr Ala Val Gly Ser Val Gly Val
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<210> 671

<211> 444

<212> DNA

<213> Homo sapiens

<400> 671

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<210> 672

<211> 103

<212> PRT

<213> Homo sapiens

<400> 672

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Ser Gly Ala Gly Glu Gly Ser Gly Tyr Leu His Ser Leu Val Ser Thr

```

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          35              40              45
Trp Lys Gly Arg Thr Cys Ala Leu Ile Leu Arg Val Leu Arg Asn Arg
   50              55              60
Ile Val Pro Ser Ser Ala Gly Gly Ser Gly Asp Ala Val Gly Asn Gln
   65              70              75              80
Thr Gly Ser Trp Arg Ser Ser Ala Arg Gln Lys Pro Val Pro Thr Gln
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<210> 673
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 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

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Thr Asn Ser Ala Thr Thr Ile Ser Leu Thr Leu Ala Asp Gln Arg Ser
          35          40          45
Asn Thr Val His Leu Lys Arg Pro Gly Arg Ile Thr Trp Val Thr Leu
          50          55          60
Cys Asp Arg His Tyr Leu Cys Ser Arg Ser Phe Ser Ser Cys Gln Tyr
   65          70          75          80
Arg Ile Phe Arg Arg Arg Leu His Gln Lys Asn Val Gly Val Thr Ala
          85          90          95
Pro Gln Thr Met Arg Thr Leu Ala Leu Thr Met Glu Ala Leu Lys Ser
          100         105         110
Ala Leu Ala Thr Thr Gly Arg Ile Tyr Gly Lys Lys Leu Leu Leu Gly

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120

125

<210> 675
<211> 8564
<212> DNA
<213> Homo sapiens

<400> 675
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<211> 2518

<212> PRT

<213> Homo sapiens

<400> 676

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Glu	Leu	Val	Pro	Pro	Arg	Leu	Ser	Lys	Glu	Glu	Leu	Ile	Gln	Asn	Met

165										170										175																																																																																																																																																																
Asp	Arg	Val	Asp	Arg	Glu	Ile	Thr	Met	Val	Glu	Gln	Gln	Ile	Ser	Lys	180	185	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	360	365	370	375	380	385	390	395	400	405	410	415	420	425	430	435	440	445	450	455	460	465	470	475	480	485	490	495	500	505	510	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	595	600	605	610	615	620	625	630	635	640	645	650	655	660	665	670	675	680	685	690	695	700	705	710	715	720	725	730	735	740	745	750	755	760	765	770	775	780	785	790	795	800	805	810	815	820	825	830	835	840	845	850	855	860	865	870	875	880	885	890	895	900	905	910	915	920	925	930	935	940	945	950	955	960	965	970	975	980	985	990	995	1000
Leu	Lys	Lys	Lys	Gln	Gln	Gln	Leu	Glu	Glu	Glu	Ala	Ala	Lys	Pro	Pro	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	360	365	370	375	380	385	390	395	400	405	410	415	420	425	430	435	440	445	450	455	460	465	470	475	480	485	490	495	500	505	510	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	595	600	605	610	615	620	625	630	635	640	645	650	655	660	665	670	675	680	685	690	695	700	705	710	715	720	725	730	735	740	745	750	755	760	765	770	775	780	785	790	795	800	805	810	815	820	825	830	835	840	845	850	855	860	865	870	875	880	885	890	895	900	905	910	915	920	925	930	935	940	945	950	955	960	965	970	975	980	985	990	995	1000						
Glu	Pro	Glu	Lys	Pro	Val	Ser	Pro	Pro	Pro	Ile	Glu	Ser	Lys	His	Arg	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	360	365	370	375	380	385	390	395	400	405	410	415	420	425	430	435	440	445	450	455	460	465	470	475	480	485	490	495	500	505	510	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	595	600	605	610	615	620	625	630	635	640	645	650	655	660	665	670	675	680	685	690	695	700	705	710	715	720	725	730	735	740	745	750	755	760	765	770	775	780	785	790	795	800	805	810	815	820	825	830	835	840	845	850	855	860	865	870	875	880	885	890	895	900	905	910	915	920	925	93																				

595				600				605							
Glu 610	Leu 610	Asn 610	Glu 610	Ser 610	Ser 615	Arg 615	Trp 615	Thr 615	Glu 615	Glu 620	Glu 620	Met 620	Glu 620	Thr 620	Ala 620
Lys 625	Lys 625	Gly 625	Leu 625	Leu 645	Glu 630	His 630	Gly 630	Arg 630	Asn 650	Trp 635	Ser 635	Ala 635	Ile 635	Ala 640	Arg 640
Met 625	Val 625	Gly 625	Ser 625	Lys 645	Thr 645	Val 645	Ser 645	Gln 645	Cys 650	Lys 650	Asn 650	Phe 655	Tyr 655	Phe 655	Asn 655
Tyr 625	Lys 625	Lys 625	Arg 625	Gln 660	Asn 660	Leu 660	Asp 660	Glu 665	Ile 665	Leu 665	Gln 670	Gln 670	His 670	Lys 670	Leu 670
Lys 625	Met 625	Glu 625	Lys 625	Glu 660	Arg 660	Asn 660	Ala 680	Arg 680	Arg 680	Lys 685	Lys 685	Lys 685	Lys 685	Ala 685	Pro 685
Ala 690	Ala 690	Ala 690	Ser 690	Glu 690	Glu 695	Ala 695	Ala 695	Phe 695	Pro 700	Pro 700	Val 700	Val 700	Glu 700	Asp 700	Glu 700
Glu 705	Met 705	Glu 705	Ala 705	Ser 710	Gly 710	Val 710	Ser 710	Gly 715	Asn 715	Glu 715	Glu 715	Glu 715	Met 720	Val 720	Glu 720
Glu 705	Ala 705	Glu 705	Ala 705	Leu 725	His 725	Ala 725	Ser 725	Gly 730	Asn 730	Glu 730	Val 730	Pro 735	Arg 735	Gly 735	Glu 735
Cys 705	Ser 705	Gly 705	Pro 740	Ala 740	Thr 740	Val 740	Asn 745	Asn 745	Ser 745	Ser 745	Asp 750	Thr 750	Glu 750	Ser 750	Ile 750
Pro 705	Ser 705	Pro 705	His 755	Thr 755	Glu 755	Ala 760	Ala 760	Lys 760	Asp 765	Thr 765	Gly 765	Gln 765	Asn 765	Gly 765	Pro 765
Lys 705	Pro 705	Pro 705	Ala 770	Thr 770	Leu 775	Gly 775	Ala 775	Asp 775	Gly 780	Pro 780	Pro 780	Pro 780	Gly 780	Pro 780	Pro 780
Thr 785	Pro 785	Pro 785	Arg 785	Arg 785	Thr 790	Ser 790	Arg 790	Ala 795	Pro 795	Ile 795	Glu 795	Pro 795	Thr 795	Pro 795	Ala 795
Ser 785	Glu 785	Ala 785	Thr 785	Gly 805	Ala 805	Pro 805	Thr 810	Pro 810	Pro 810	Pro 810	Ala 815	Pro 815	Pro 815	Ser 815	Pro 815
Ser 785	Ala 785	Pro 785	Pro 785	Pro 820	Val 820	Val 820	Pro 825	Lys 825	Glu 825	Glu 825	Lys 830	Glu 830	Glu 830	Thr 830	Pro 830
Ala 835	Ala 835	Ala 835	Pro 835	Pro 835	Val 840	Glu 840	Glu 840	Gly 840	Glu 845	Glu 845	Gln 845	Lys 845	Pro 845	Pro 845	Ala 845
Ala 850	Glu 850	Glu 850	Leu 850	Ala 855	Val 855	Asp 855	Thr 855	Gly 855	Lys 860	Ala 860	Glu 860	Glu 860	Pro 860	Val 860	Lys 860
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Ala 865	Glu 865	Ala 865	Ala 865	Glu 885	Ala 885	Thr 885	Ala 890	Gly 890	Gly 890	Ala 890	Leu 895	Lys 895	Ala 895	Glu 895	Lys 895
Lys 865	Glu 865	Gly 865	Gly 865	Ser 890	Gly 890	Arg 890	Ala 905	Thr 905	Thr 905	Ala 910	Lys 910	Ser 910	Ser 910	Gly 910	Ala 910
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Glu 865	Ala 865	Glu 865	Gly 865	Gly 865	Asp 865	Lys 865	Asn 865	Arg 865	Leu 865	Leu 865	Ser 865	Pro 865	Arg 865	Pro 865	Ser 865
Leu 865	Leu 865	Thr 865	Pro 865	Thr 865	Gly 865	Asp 865	Pro 865	Arg 865	Ala 865	Asn 865	Ala 865	Pro 865	Pro 865	Gln 865	Lys 865
Pro 865	Leu 865	Asp 865	Leu 865	Lys 865	Gln 865	Leu 865	Lys 865	Gln 865	Arg 865	Ala 865	Ala 865	Ile 865	Pro 865	Pro 865	Pro 865
Ile 865	Gln 865	Val 865	Thr 865	Lys 865	Val 865	His 865	Glu 865	Pro 865	Pro 865	Arg 865	Glu 865	Asp 865	Ala 865	Ala 865	Pro 865
Thr 865	Lys 865														

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 Gln Lys Leu Pro Gly Asp Pro Pro Cys Trp Thr Ser Gly Leu Pro Phe
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 Pro Val Pro Pro Arg Glu Val Ile Lys Ala Ser Pro His Ala Pro Asp
 1060 1065 1070
 Pro Ser Ala Phe Ser Tyr Ala Pro Pro Gly His Pro Leu Pro Leu Gly
 1075 1080 1085
 Leu His Asp Thr Ala Arg Pro Val Leu Pro Arg Pro Pro Thr Ile Ser
 1090 1095 1100
 Asn Pro Pro Pro Leu Ile Ser Ser Ala Lys His Pro Ser Val Leu Glu
 1105 1110 1115 1120
 Arg Gln Ile Gly Ala Ile Ser Gln Gly Met Ser Val Gln Leu His Val
 1125 1130 1135
 Pro Tyr Ser Glu His Ala Lys Ala Pro Val Gly Pro Val Thr Met Gly
 1140 1145 1150
 Leu Pro Leu Pro Met Asp Pro Lys Lys Leu Ala Pro Phe Ser Gly Val
 1155 1160 1165
 Lys Gln Glu Gln Leu Ser Pro Arg Gly Gln Ala Gly Pro Pro Glu Ser
 1170 1175 1180
 Leu Gly Val Pro Thr Ala Gln Glu Ala Ser Val Leu Arg Gly Thr Ala
 1185 1190 1195 1200
 Leu Gly Ser Val Pro Gly Gly Ser Ile Thr Lys Gly Ile Pro Ser Thr
 1205 1210 1215
 Arg Val Pro Ser Asp Ser Ala Ile Thr Tyr Arg Gly Ser Ile Thr His
 1220 1225 1230
 Gly Thr Pro Ala Asp Val Leu Tyr Lys Gly Thr Ile Thr Arg Ile Ile
 1235 1240 1245
 Gly Glu Asp Ser Pro Ser Arg Leu Asp Arg Gly Arg Glu Asp Ser Leu
 1250 1255 1260
 Pro Lys Gly His Val Ile Tyr Glu Gly Lys Lys Gly His Val Leu Ser
 1265 1270 1275 1280
 Tyr Glu Gly Gly Met Ser Val Thr Gln Cys Ser Lys Glu Asp Gly Arg
 1285 1290 1295
 Ser Ser Ser Gly Pro Pro His Glu Thr Ala Ala Pro Lys Arg Thr Tyr
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 Asp Met Met Glu Gly Arg Val Gly Arg Ala Ile Ser Ser Ala Ser Ile
 1315 1320 1325
 Glu Gly Leu Met Gly Arg Ala Ile Pro Pro Glu Arg His Ser Pro His
 1330 1335 1340
 His Leu Lys Glu Gln His His Ile Arg Gly Ser Ile Thr Gln Gly Ile
 1345 1350 1355 1360
 Pro Arg Ser Tyr Val Glu Ala Gln Glu Asp Tyr Leu Arg Arg Glu Ala
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 Lys Leu Leu Lys Arg Glu Gly Thr Pro Pro Pro Pro Pro Ser Arg
 1380 1385 1390
 Asp Leu Thr Glu Ala Tyr Lys Thr Gln Ala Leu Gly Pro Leu Lys Leu
 1395 1400 1405
 Lys Pro Ala His Glu Gly Leu Val Ala Thr Val Lys Glu Ala Gly Arg
 1410 1415 1420
 Ser Ile His Glu Ile Pro Arg Glu Glu Leu Arg His Thr Pro Glu Leu
 1425 1430 1435 1440
 Pro Leu Ala Pro Arg Pro Leu Lys Glu Gly Ser Ile Thr Gln Gly Thr
 1445 1450 1455
 Pro Leu Lys Tyr Asp Thr Gly Ala Ser Thr Thr Gly Ser Lys Lys His

1460 1465 1470
 Asp Val Arg Ser Leu Ile Gly Ser Pro Gly Arg Thr Phe Pro Pro Val
 1475 1480 1485
 His Pro Leu Asp Val Met Ala Asp Ala Arg Ala Leu Glu Arg Ala Cys
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 Tyr Glu Glu Ser Leu Lys Ser Arg Pro Gly Thr Ala Ser Ser Ser Gly
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 Gly Ser Ile Ala Arg Gly Ala Pro Val Ile Val Pro Glu Leu Gly Lys
 1525 1530 1535
 Pro Arg Gln Ser Pro Leu Thr Tyr Glu Asp His Gly Ala Pro Phe Ala
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 Gly His Leu Pro Arg Gly Ser Pro Val Thr Thr Arg Glu Pro Thr Pro
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 Arg Leu Gln Glu Gly Ser Leu Ser Ser Ser Lys Ala Ser Gln Asp Arg
 1570 1575 1580
 Lys Leu Thr Ser Thr Pro Arg Glu Ile Ala Lys Ser Pro His Ser Thr
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 Val Pro Glu His His Pro His Pro Ile Ser Pro Tyr Glu His Leu Leu
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 Arg Gly Val Ser Gly Val Asp Leu Tyr Arg Ser His Ile Pro Leu Ala
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 Phe Asp Pro Thr Ser Ile Pro Arg Gly Ile Pro Leu Asp Ala Ala Ala
 1635 1640 1645
 Ala Tyr Tyr Leu Pro Arg His Leu Ala Pro Asn Pro Thr Tyr Pro His
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 Leu Tyr Pro Pro Tyr Leu Ile Arg Gly Tyr Pro Asp Thr Ala Ala Leu
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 Glu Asn Arg Gln Thr Ile Ile Asn Asp Tyr Ile Thr Ser Gln Gln Met
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 His His Asn Thr Ala Thr Ala Met Ala Gln Arg Ala Asp Met Leu Arg
 1700 1705 1710
 Gly Leu Ser Pro Arg Glu Ser Ser Leu Ala Leu Asn Tyr Ala Ala Gly
 1715 1720 1725
 Pro Arg Gly Ile Ile Asp Leu Ser Gln Val Pro His Leu Pro Val Leu
 1730 1735 1740
 Val Pro Pro Thr Pro Gly Thr Pro Ala Thr Ala Met Asp Arg Leu Ala
 1745 1750 1755 1760
 Tyr Leu Pro Thr Ala Pro Gln Pro Phe Ser Ser Arg His Ser Ser Ser
 1765 1770 1775
 Pro Leu Ser Pro Gly Gly Pro Thr His Leu Thr Lys Pro Thr Thr Thr
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 Ser Ser Ser Glu Arg Glu Arg Asp Arg Asp Arg Glu Arg Asp Arg Asp
 1795 1800 1805
 Arg Glu Arg Glu Lys Ser Ile Leu Thr Ser Thr Thr Val Glu His
 1810 1815 1820
 Ala Pro Ile Trp Arg Pro Gly Thr Glu Gln Ser Ser Gly Ser Ser Gly
 1825 1830 1835 1840
 Ser Ser Ser Gly Gly Gly Gly Ser Ser Ser Arg Pro Ala Ser His Ser
 1845 1850 1855
 His Ala His Gln His Ser Pro Ile Ser Pro Arg Thr Gln Asp Ala Leu
 1860 1865 1870
 Gln Gln Arg Pro Ser Val Leu His Asn Thr Gly Met Lys Gly Ile Ile
 1875 1880 1885
 Thr Ala Val Glu Pro Ser Thr Pro Thr Val Leu Arg Ser Thr Ser Thr

1890					1895					1900					
Ser	Ser	Pro	Val	Arg	Pro	Ala	Ala	Thr	Phe	Pro	Pro	Ala	Thr	His	Cys
1905					1910					1915					1920
Pro	Leu	Gly	Gly	Thr	Leu	Asp	Gly	Val	Tyr	Pro	Thr	Leu	Met	Glu	Pro
					1925					1930					1935
Val	Leu	Leu	Pro	Lys	Glu	Ala	Pro	Arg	Val	Ala	Arg	Pro	Glu	Arg	Pro
					1940					1945					1950
Arg	Ala	Asp	Thr	Gly	His	Ala	Phe	Leu	Ala	Lys	Pro	Pro	Ala	Arg	Ser
					1955					1960					1965
Gly	Leu	Glu	Pro	Ala	Ser	Ser	Pro	Ser	Lys	Gly	Ser	Glu	Pro	Arg	Pro
					1970					1975					1980
Leu	Val	Pro	Pro	Val	Ser	Gly	His	Ala	Thr	Ile	Ala	Arg	Thr	Pro	Ala
1985					1990					1995					2000
Lys	Asn	Leu	Ala	Pro	His	His	Ala	Ser	Pro	Asp	Pro	Pro	Ala	Pro	Pro
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Ala	Ser	Ala	Ser	Asp	Pro	His	Arg	Glu	Lys	Thr	Gln	Ser	Lys	Pro	Phe
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Ser	Ile	Gln	Glu	Leu	Glu	Leu	Arg	Ser	Leu	Gly	Tyr	His	Gly	Ser	Ser
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Tyr	Ser	Pro	Glu	Gly	Val	Glu	Pro	Val	Ser	Pro	Val	Ser	Ser	Pro	Ser
					2050					2055					2060
Leu	Thr	His	Asp	Lys	Gly	Leu	Pro	Lys	His	Leu	Glu	Glu	Leu	Asp	Lys
2065					2070					2075					2080
Ser	His	Leu	Glu	Gly	Glu	Leu	Arg	Pro	Lys	Gln	Pro	Gly	Pro	Val	Lys
					2085					2090					2095
Leu	Gly	Gly	Glu	Ala	Ala	His	Leu	Pro	His	Leu	Arg	Pro	Leu	Pro	Glu
					2100					2105					2110
Ser	Gln	Pro	Ser	Ser	Ser	Pro	Leu	Leu	Gln	Thr	Ala	Pro	Gly	Val	Lys
					2115					2120					2125
Gly	His	Gln	Arg	Val	Val	Thr	Leu	Ala	Gln	His	Ile	Ser	Glu	Val	Ile
					2130					2135					2140
Thr	Gln	Asp	Tyr	Thr	Arg	His	His	Pro	Gln	Gln	Leu	Ser	Ala	Pro	Leu
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Pro	Ala	Pro	Leu	Tyr	Ser	Phe	Pro	Gly	Ala	Ser	Cys	Pro	Val	Leu	Asp
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Leu	Arg	Arg	Pro	Pro	Ser	Asp	Leu	Tyr	Leu	Pro	Pro	Pro	Asp	His	Gly
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Ala	Pro	Ala	Arg	Gly	Ser	Pro	His	Ser	Glu	Gly	Gly	Lys	Arg	Ser	Pro
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Pro	Val	Ser	Pro	Pro	Glu	Gly	Met	Thr	Glu	Pro	Gly	His	Ser	Arg	Ser
2225					2230					2235					2240
Ala	Val	Tyr	Pro	Leu	Leu	Tyr	Arg	Asp	Gly	Glu	Gln	Thr	Glu	Pro	Ser
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Arg	Met	Gly	Ser	Lys	Ser	Pro	Gly	Asn	Thr	Ser	Gln	Pro	Pro	Ala	Phe
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Phe	Ser	Lys	Leu	Thr	Glu	Ser	Asn	Ser	Ala	Met	Val	Lys	Ser	Lys	Lys
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Gln	Glu	Ile	Asn	Lys	Lys	Leu	Asn	Thr	His	Asn	Arg	Asn	Glu	Pro	Glu
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Tyr	Asn	Ile	Ser	Gln	Pro	Gly	Thr	Glu	Ile	Phe	Asn	Met	Pro	Ala	Ile
2305					2310					2315					2320
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 2340 2345 2350
 Gly Lys Tyr Asp Gln Trp Glu Glu Ser Pro Pro Leu Ser Ala Asn Ala
 2355 2360 2365
 Phe Asn Pro Leu Asn Ala Ser Ala Ser Leu Pro Ala Ala Met Pro Ile
 2370 2375 2380
 Thr Ala Ala Asp Gly Arg Ser Asp His Thr Leu Thr Ser Pro Gly Gly
 2385 2390 2395 2400
 Gly Gly Lys Ala Lys Val Ser Gly Arg Pro Ser Ser Arg Lys Ala Lys
 2405 2410 2415
 Ser Pro Ala Pro Gly Leu Ala Ser Gly Asp Arg Pro Pro Ser Val Ser
 2420 2425 2430
 Ser Val His Ser Glu Gly Asp Cys Asn Arg Arg Thr Pro Leu Thr Asn
 2435 2440 2445
 Arg Val Trp Glu Asp Arg Pro Ser Ser Ala Gly Ser Thr Pro Phe Pro
 2450 2455 2460
 Tyr Asn Pro Leu Ile Met Arg Leu Gln Ala Gly Val Met Ala Ser Pro
 2465 2470 2475 2480
 Pro Pro Pro Gly Leu Pro Ala Gly Ser Gly Pro Leu Ala Gly Pro His
 2485 2490 2495
 His Ala Trp Asp Glu Glu Pro Lys Pro Leu Leu Cys Ser Gln Tyr Glu
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 Thr Leu Ser Asp Ser Glu
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<211> 345

<212> DNA

<213> Homo sapiens

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 180
 cgcacgaag cttcaagtgg tttgagtcag gaagaaatcg acagaatgaa agctgaggca
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 gaacagaatg cagcagcagg caaggctgaa cgcgaaaaga ttgataagct gaaccaagct
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<211> 110

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Ala Lys Asp Lys Ala Thr Gly Lys Glu Gln Lys Ile Arg Ile Glu Ala
      50                55                60
Ser Ser Gly Leu Ser Gln Glu Glu Ile Asp Arg Met Lys Ala Glu Ala
      65                70                75                80
Glu Gln Asn Ala Ala Ala Gly Lys Ala Glu Arg Glu Lys Ile Asp Lys
      85                90                95
Leu Asn Gln Ala Asp Ser Met Ile Ser Pro Pro Glu Asn Ser
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120
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180
caaaaaagtc tcataaaggg aggattgcta aaagacgata cccattagg taaagtgggt
240
gcgcgtgacg gacagcagtt catgtgtgctg ggtgctgtgg gtgagctgcc caaggcccca
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Val Thr His Val Pro Pro Glu Arg Gln Lys Val Leu Ile Lys Gly Gly
      35                40                45
Leu Leu Lys Asp Asp Thr Pro Leu Gly Lys Val Gly Ala Arg Ala Gly
      50                55                60
Gln Gln Phe Met Val Leu Gly Ala Val Gly Glu Leu Pro Lys Ala Pro
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Glu Lys Pro Val Leu Phe Leu Glu Asp Leu Pro Glu Asp Glu Leu Asn
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Lys Ala Lys Asp
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 120
 ggttttgatt ttatcggaag tacttttagta ggatatacaa aacaaagtaa aggtgacaaa
 180
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 240
 attgcagaag gcaatatcga tacacctgaa aaggtgaaac gtgtgcttga gttaggcgcg
 300
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 35 40 45
 Leu Val Gly Tyr Thr Lys Gln Ser Lys Gly Asp Lys Ile Glu Glu Asn
 50 55 60
 Asp Phe Glu Ile Leu Arg Thr Val Leu Glu Arg Ile Lys His Pro Leu
 65 70 75 80
 Ile Ala Glu Gly Asn Ile Asp Thr Pro Glu Lys Val Lys Arg Val Leu
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 180

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 240
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 300
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		20						25					30		
Val	Ser	Tyr	Pro	Lys	Asn	His	Val	Leu	Arg	Ala	Gln	Ser	Ala	Leu	His
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Gln	Tyr	Leu	Leu	Ala	Ile	His	His	Ala	Ile	Ser	Ala	His	Ser	Val	Ser
	65			70					75				80		
Gly	Lys	Ile	Gln	Ala	Met	Ser	Leu	Glu	Ala	Gln	Ile	Val	Gln	Asp	Ala
		85						90					95		
Asp	Arg	Leu	Asp	Ala	Leu	Gly	Ala	Ile	Gly	Val	Ala	Arg	Cys	Ile	Gln
		100					105						110		
Val	Ser	Ser	Gln	Leu	Gln	Arg	Pro	Leu	Tyr	Ser	Glu	Val	Asp	Pro	Phe
	115					120					125				
Ser	Glu	Thr	Arg	Ser	Leu	Val	Cys	Met							
	130					135									

<210> 685

<211> 417

<212> DNA

<213> Homo sapiens

<400> 685

acgcgttgctg ttcgaggatg aaccggaac gatggatgga ttgacactat tcggcctgtt
 60
 cgccgtcact gcgatgctgg tctgctatgc catggaggac cgcagccact gggttcgtgt
 120
 gctgttcgag gccgcttgcc gctcggttcg gcctacggct tcctccaagg cgcttgccg
 180
 ttccgcttcg tcgaggcgat atgggcgcgc gttgcctcgc gcgtgggtgga cgatcaggcc
 240
 gcgatgaccg catcgtccgg ctttaagccc gaaacgaaa cgaccagtgc gctggtttga
 300
 tgggcggcgc gtcgctggat gcacagcgtc tcgacgcgag cgtgatgatg gcctcagcgc
 360
 gtgcgatgccg acgctgtcgc tcacgcgct acgctcgacc acggcgcgcg gcaatag
 417

<210> 686
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 686
 Met Pro Trp Arg Thr Ala Ala Thr Gly Ser Cys Cys Cys Ser Arg Pro
 1 5 10 15
 Leu Gly Ala Arg Phe Gly Leu Arg Leu Pro Pro Arg Arg Leu Ala Val
 20 25 30
 Arg Leu Arg Arg Gly Asp Met Gly Ala Arg Cys Leu Arg Arg Gly Gly
 35 40 45
 Arg Ser Gly Arg Asp Asp Arg Ile Val Arg Leu Lys Pro Gly Asn Glu
 50 55 60
 Thr Asp Gln Cys Ala Gly Leu Met Gly Gly Ala Ser Leu Asp Ala Gln
 65 70 75 80
 Arg Leu Asp Ala Ser Val Met Met Ala Ser Ala Arg Ala Cys Arg Arg
 85 90 95
 Cys Arg Ser Ser Arg Tyr Ala Arg Pro Arg Arg Ala Ala Ile
 100 105 110

<210> 687
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 687
 nnaacgctga cgcaccaact gcgagccacc ctgctcgcca tggctgctat ggggttgcat
 60
 gacggcatcg atattccgtc tggggcgatt attgaaagct gccgcacett atcagccgtt
 120
 ctcgatgaaa ccacgggtgg tcgcacgacg gagcttcggg taccacctgc gtgcgcgggt
 180
 caattggcgg ccattgagtc gggccccaac caccaccggg gcactccgcc caatgtggcc
 240
 gagaccgacc ctgtcacctt cctgcagttg gcaactggct tctcacactg gccagaaatg
 300
 cgctcagcag gacgggttca ggcgtctgga tcccacgtcg acgacgttgc tggcgtgttc
 360
 ccagtcgttg atatggcggg ggttttccgc gacatttttg ccgacgacta ga
 412

<210> 688
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 688
 Xaa Arg Val Thr Asp Gln Leu Arg Ala Thr Leu Leu Ala Met Ala Ala
 1 5 10 15
 Met Gly Leu His Asp Gly Ile Asp Ile Pro Ser Gly Ala Ile Ile Glu
 20 25 30
 Ser Cys Arg Thr Leu Ser Ala Val Leu Asp Glu Thr His Gly Gly Arg

```

      35              40              45
Thr Ile Glu Leu Arg Val Pro Ala Cys Ala Val Gln Leu Ala Ala
  50              55              60
Ile Glu Ser Gly Pro Asn His His Arg Gly Thr Pro Pro Asn Val Ala
  65              70              75              80
Glu Thr Asp Pro Val Thr Phe Leu Gln Leu Ala Thr Gly Phe Ser His
      85              90              95
Trp Pro Glu Met Arg Ser Ala Gly Arg Val Gln Ala Ser Gly Ser His
      100              105              110
Val Asp Asp Val Ala Gly Val Phe Pro Val Val Asp Met Ala Gly Val
      115              120              125
Phe Arg Asp Ile Phe Ala Asp Asp
      130              135

```

<210> 689

<211> 499

<212> DNA

<213> Homo sapiens

<400> 689

```

cgcgctgcggt tactcgacgt cgatttttcat cacggtaacg gcacccagaa cattttttac
  60
ccgcgcaatg acgtgatgtt catatcgctg cacggcgagc cggccgtgtc ctatccctac
  120
tattcggggt tcagcgatga agtcggcgca ggtgttgagg aagggttcaa cctcaactac
  180
ccgctgcgca aaaacaccgc ctgggatacc taccgcgacg ccctgctgca tgcctgcagg
  240
aaactccagc aattctcgcc gcaggatttg gtgatctcac tgggggtcga caccttcaag
  300
gacgacccga tcagtcactt cctgctggaa ggcgaggatt tcatcgggat cggcgagctg
  360
atagcgagtg tgggttgccc caccctgttt gtgatggaag gcggctatat ggtcgatgaa
  420
atcggaatca acgcggtgaa cgtactgcat ggcttcgaga gcaagcgcgc ttgagcatcc
  480
gcccgaagac ggcgtgata
  499

```

<210> 690

<211> 157

<212> PRT

<213> Homo sapiens

<400> 690

```

Arg Val Ala Val Leu Asp Val Asp Phe His His Gly Asn Gly Thr Gln
  1              5              10              15
Asn Ile Phe Tyr Pro Arg Asn Asp Val Met Phe Ile Ser Leu His Gly
      20              25              30
Glu Pro Ala Val Ser Tyr Pro Tyr Tyr Ser Gly Phe Ser Asp Glu Val
      35              40              45
Gly Ala Gly Val Gly Glu Gly Phe Asn Leu Asn Tyr Pro Leu Pro Lys
      50              55              60
Asn Thr Ala Trp Asp Thr Tyr Arg Asp Ala Leu Leu His Ala Cys Arg

```



```

65          70          75          80
Lys Leu Gln Gln Phe Ser Pro Gln Val Leu Val Ile Ser Leu Gly Val
      85          90          95
Asp Thr Phe Lys Asp Asp Pro Ile Ser His Phe Leu Leu Glu Gly Glu
      100        105        110
Asp Phe Ile Gly Ile Gly Glu Leu Ile Ala Ser Val Gly Cys Pro Thr
      115        120        125
Leu Phe Val Met Glu Gly Gly Tyr Met Val Asp Glu Ile Gly Ile Asn
      130        135        140
Ala Val Asn Val Leu His Gly Phe Glu Ser Lys Arg Ala
145          150          155

```

<210> 691

<211> 336

<212> DNA

<213> Homo sapiens

<400> 691

```

ntgctgctgtg aaaacgtgca gcgcggcgca tcagcgactg gcgagcgctt tggctggagt
60
tcgcaaaggc aaggcccttg ggagttggcc tgcgacatcg cgctgccgtg cgccaccacg
120
aacgaactgg acgccgacgc cgcccgcacg ctgctgcgca acggctgcct ttgctgtggct
180
ggaggcgcgca atatgccgcc gcgccttgag gctgtggata tctttatcga ggcggggcatt
240
ctgttctgcgc ccggcaaggc atccaatgcc ggccggcgtgg ccgtgagtgg cctggaaatg
300
tcgcagaacg ccattgcgcct gctgtggacc gccggc
336

```

<210> 692

<211> 112

<212> PRT

<213> Homo sapiens

<400> 692

```

Xaa Leu Arg Glu Asn Val Gln Arg Gly Ala Ser Ala Thr Gly Glu Arg
1      5      10      15
Phe Gly Trp Ser Ser Gln Arg Gln Gly Pro Trp Glu Leu Ala Cys Asp
      20      25      30
Ile Ala Leu Pro Cys Ala Thr Gln Asn Glu Leu Asp Ala Asp Ala Ala
      35      40      45
Arg Thr Leu Leu Arg Asn Gly Cys Leu Cys Val Ala Gly Gly Ala Asn
      50      55      60
Met Pro Pro Ala Leu Glu Ala Val Asp Ile Phe Ile Glu Ala Gly Ile
65      70      75      80
Leu Phe Ala Pro Gly Lys Ala Ser Asn Ala Gly Gly Val Ala Val Ser
      85      90      95
Gly Leu Glu Met Ser Gln Asn Ala Met Arg Leu Leu Trp Thr Ala Gly
100        105        110

```

<210> 693

<211> 580

<212> DNA

<213> Homo sapiens

<400> 693

ngggcaaccc ggaaggtccg gcgtcccagc cgcctacctc gctgggaccc tggctctgct
 60
 gtcccccgct ggctcctgc ccaagcgact gcggccagga tgggccggaa ggtgaccgtg
 120
 gccacctcgc cactcaacca gtgggccctg gacttcgagg gcaatttgca aagaatttta
 180
 aagagtattg aaattgccaa aaacagagga gcaagataca ggcttgacc agagctggaa
 240
 atatgcggct gcggatgttg ggatcattat tacgagtcgg acacctctt gcaactgttt
 300
 caagctctag cgcccttgt ggagtctccc gtcactcagg acatcatctg cgacgtgggg
 360
 atacctgtaa tgcaccgaaa cgtccgctac aactgcagag tgatattcct caacaggaa
 420
 atcctgtctca tcagacccaa gatggccttg gccaatgaag gcaactaccg cgagctgcgc
 480
 tggttcacc cgtggtcgag gagtcggtga gtcgggtgcc tgaccactcc tgggatgtgc
 540
 gttaaagcacc tccgtgtgt gtagccttgg gtcctgatca
 580

<210> 694

<211> 136

<212> PRT

<213> Homo sapiens

<400> 694

Met	Gly	Arg	Lys	Val	Thr	Val	Ala	Thr	Cys	Ala	Leu	Asn	Gln	Trp	Ala
1				5					10				15		
Leu	Asp	Phe	Glu	Gly	Asn	Leu	Gln	Arg	Ile	Leu	Lys	Ser	Ile	Glu	Ile
			20					25					30		
Ala	Lys	Asn	Arg	Gly	Ala	Arg	Tyr	Arg	Leu	Gly	Pro	Glu	Leu	Glu	Ile
			35				40					45			
Cys	Gly	Cys	Gly	Cys	Trp	Asp	His	Tyr	Tyr	Glu	Ser	Asp	Thr	Leu	Leu
	50				55						60				
His	Ser	Phe	Gln	Val	Leu	Ala	Ala	Leu	Val	Glu	Ser	Pro	Val	Thr	Gln
	65				70					75				80	
Asp	Ile	Ile	Cys	Asp	Val	Gly	Ile	Pro	Val	Met	His	Arg	Asn	Val	Arg
			85						90					95	
Tyr	Asn	Cys	Arg	Val	Ile	Phe	Leu	Asn	Arg	Lys	Ile	Leu	Leu	Ile	Arg
			100					105					110		
Pro	Lys	Met	Ala	Leu	Ala	Asn	Glu	Gly	Asn	Tyr	Arg	Glu	Leu	Arg	Trp
			115				120						125		
Phe	Thr	Pro	Trp	Ser	Arg	Ser	Arg								
	130						135								

<210> 695

<211> 439

<212> DNA

<213> Homo sapiens

<400> 695
 ntgggtgactc aggcgtccaa tggcacgatg gctgacgtcg tcaatatgcc gtcctcgacc
 60
 atcatggctc tgctgagggc tgattacctg ctcgatatcg agacttcgggt gcccggtatc
 120
 ggcgacaagt tcgtcccggc cgtctggggc aaactcaaac tcggcaagga caacgagcac
 180
 accgctctgc cctgggtactt cggccccgttc gtcgtgacgt acaacaagga cattttcaag
 240
 gatgttggcc tcgatcccg aatccccggc aagacgatga ccgagtacct cgacttcggc
 300
 aagaaaaatca ccgctgccgg caagcaggcg gtctatggca acacgtcgtg gtacatgctc
 360
 gcggaatggc gtgccctcgg cgtcaaggtc atgaatgacg acttcaccaa gttcactttt
 420
 gcctcggaat ccaacgcgt
 439

<210> 696
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 696
 Xaa Val Thr Gln Ala Ser Asn Gly Thr Met Ala Asp Val Val Asn Met
 1 5 10 15
 Pro Ser Ser Thr Ile Met Ala Leu Ser Arg Ala Asp Tyr Leu Leu Asp
 20 25 30
 Ile Glu Thr Ser Val Pro Gly Ile Gly Asp Lys Phe Val Pro Asp Val
 35 40 45
 Trp Gly Lys Leu Lys Leu Gly Lys Asp Asn Glu His Thr Ala Leu Pro
 50 55 60
 Trp Tyr Phe Gly Pro Phe Val Val Thr Tyr Asn Lys Asp Ile Phe Lys
 65 70 75 80
 Asp Val Gly Leu Asp Pro Glu Ile Pro Pro Lys Thr Met Thr Glu Tyr
 85 90 95
 Leu Asp Phe Ala Lys Lys Ile Thr Ala Ala Gly Lys Gln Ala Val Tyr
 100 105 110
 Gly Asn Thr Ser Trp Tyr Met Leu Ala Glu Trp Arg Ala Leu Gly Val
 115 120 125
 Lys Val Met Asn Asp Asp Phe Thr Lys Phe Thr Phe Ala Ser Glu Ser
 130 135 140
 Asn Ala
 145

<210> 697
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 697
 nggcaataac gccgtcgtcg aaatccgttc ccttgatctc gaacatgccg atgaagcggg
 60

tgcggtgat ggggtcggag atgtgcacct ccacaaactt gaacttgatc ggaccaaccc
 120
 ttccaccct ggagagactc gcctgccttg aaagtcttct tgcccttctt gggaactga
 180
 tcgcccctcc gaacgagata atccaagctc aagcgaccgc ccaccttgctc gcgcgcctcc
 240
 acaccgacgg aatgcgatgc cgggatcgca tcgatgctag cggcggtgcg tgcaatgaca
 300
 atcttgctct cagcgagcga tacggggccc cgttggaat cgaacacaaa caccttgaaag
 360
 gcgttgtn
 368

<210> 698

<211> 108

<212> PRT

<213> Homo sapiens

<400> 698

Met	Pro	Met	Lys	Arg	Leu	Ser	Val	Met	Gly	Ser	Glu	Met	Ser	Pro	Ser
1			5					10					15		
His	Asn	Leu	Asn	Leu	Ile	Gly	Pro	Thr	Leu	Ser	Thr	Leu	Glu	Arg	Leu
		20					25					30			
Ala	Cys	Leu	Glu	Ser	Leu	Leu	Ala	Leu	Gly	Gln	Leu	Ile	Ala	Leu	
		35				40				45					
Pro	Asn	Glu	Ile	Ile	Gln	Ala	Gln	Ala	Thr	Ala	His	Leu	Val	Ala	Arg
	50				55					60					
Leu	His	Thr	Asp	Gly	Met	Arg	Cys	Arg	Asp	Arg	Ile	Asp	Ala	Ser	Gly
65			70						75					80	
Gly	Ala	Cys	Asn	Asp	Asn	Leu	Val	Phe	Thr	Gln	Arg	Tyr	Gly	Pro	Ala
		85						90					95		
Val	Gly	Ile	Glu	His	Lys	His	Leu	Glu	Gly	Val	Val				
		100						105							

<210> 699

<211> 363

<212> DNA

<213> Homo sapiens

<400> 699

nacgcgtaca caaatagtat cggaatcatt tcctatcatg ctgctatgac gagatttctc
 60
 cacacctcag attggcaact ggggatgact cggcactacc tgcgaagcg cggcgacgac
 120
 gaccacacgg cacggtttac tgccgatcga atcgagacgg tgcgcaggct gggcgacggt
 180
 gccggaagg agggctgcga gtttgtcgtc gtcgccggag atgtcttcga aaccacaaat
 240
 gtctccactc agatcattgc ccgcgcgtgt gaggcgatag cctccattga tctccccgtg
 300
 tactctgtgc ccggaatat cgacagctta gagccggggt gtctctggga tgggccagaa
 360
 ttc
 363

<210> 700
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 700
 Xaa Ala Tyr Thr Asn Ser Ile Gly Ile Ile Ser Tyr His Ala Ala Met
 1 5 10 15
 Thr Arg Phe Leu His Thr Ser Asp Trp Gln Leu Gly Met Thr Arg His
 20 25 30
 Tyr Leu Ser Lys Arg Gly Asp Asp Asp Pro Gln Ala Arg Phe Thr Ala
 35 40 45
 Asp Arg Ile Glu Thr Val Arg Arg Leu Gly Asp Val Ala Arg Lys Glu
 50 55 60
 Gly Cys Glu Phe Val Val Val Ala Gly Asp Val Phe Glu Thr His Asn
 65 70 75 80
 Val Ser Thr Gln Ile Ile Ala Arg Ala Cys Glu Ala Ile Ala Ser Ile
 85 90 95
 Asp Leu Pro Val Tyr Leu Leu Pro Gly Asn His Asp Ser Leu Glu Pro
 100 105 110
 Gly Cys Leu Trp Asp Gly Pro Glu Phe
 115 120

<210> 701
 <211> 585
 <212> DNA
 <213> Homo sapiens

<400> 701
 nacgcgtccg ggcacaccgt caccgaggcg acgttccacg gccaccccac gctgatctat
 60
 ttccggtacg tccattgcgc gcatgtctgc ccgctgacac tgggcaacat ggtctcggcc
 120
 ctccgatccg tgggctcccg ggccgacggc atcgttccga tcttcatctc cgtccgatccg
 180
 gcccgcgaca ccccgcgct ggtcggacag tatgtcgcgc atttctcgcc gcggatcgtc
 240
 ggcgtgaccg gcaccgcagc gcagctggcg ccggtactgg cggagtcca catcaccgcg
 300
 cgcgccgaac ctgcggcaca cgacatggcc gccgacatgt atgcctgcga ccacagcgcc
 360
 ctctctatc tcatggaacg caacaaccgc ctgttgcggg tcatggcggc cagcgccgac
 420
 gctgcctcgc tgacgcacca gctggcgggc ggctggccg gggcaagaat gagaccatga
 480
 aagcgatcgg accgacggac gccccgaac aggcagcgcc gggctggctg ttcggcatca
 540
 tctgtctgct cggcatcgcc ggcgtgctcg atttcgtcga ccggt
 585

<210> 702
 <211> 159
 <212> PRT

<213> Homo sapiens

<400> 702

```

Xaa Ala Ser Gly His Thr Val Thr Glu Ala Thr Phe His Gly His Pro
 1           5           10           15
Thr Leu Ile Tyr Phe Gly Tyr Val His Cys Ala Asp Val Cys Pro Leu
          20           25           30
Thr Leu Gly Asn Met Val Ser Ala Leu Asp Arg Leu Gly Ser Arg Ala
          35           40           45
Asp Gly Ile Val Pro Ile Phe Ile Ser Val Asp Pro Ala Arg Asp Thr
          50           55           60
Pro Ala Leu Val Gly Gln Tyr Val Ala His Phe Ser Pro Arg Ile Val
65           70           75           80
Gly Leu Thr Gly Thr Ala Ala Gln Leu Ala Pro Val Leu Ala Glu Phe
          85           90           95
His Ile Thr Ala Arg Ala Glu Pro Ala Ala His Asp Met Ala Ala Asp
          100          105          110
Met Tyr Ala Val Asp His Ser Ala Leu Leu Tyr Leu Met Asp Gly Asn
          115          120          125
Asn Arg Leu Leu Arg Val Met Ala Val Ser Ala Asp Ala Ala Ser Leu
          130          135          140
Thr His Gln Leu Ala Ala Gly Leu Ala Gly Ala Arg Met Arg Pro
145          150          155

```

<210> 703

<211> 390

<212> DNA

<213> Homo sapiens

<400> 703

```

ttctctgctc catcacacc tcagcagaat ggcacgcgcg agcgcaagaa cataactctt
60
attgagatgg cccgaacgat gcttgatgag tacaagactc cgcggaagtt ctggcctgaa
120
gccattgata ctgcttgatca caccatcaac cgcgtttatc ttcaacaggt ttggagaaaa
180
acctcttatg agttcctaac tggttaagaaa cccaatgtaa gctattttcag agtatttggg
240
gctaggtgct ggatcaagga tcctcatcac acttcaaaa ttgcaccgaa agcacatgaa
300
ggttttatgc ttggttacgg aaaggattcg cactcctaca gagtcttcaa cctctttcac
360
tataaagtgg ttcaaaactgt ggaatgtgcn
390

```

<210> 704

<211> 130

<212> PRT

<213> Homo sapiens

<400> 704

```

Phe Ser Ala Pro Tyr Thr Pro Gln Gln Asn Gly Ile Ala Glu Arg Lys
 1           5           10           15
Asn Ile Thr Leu Ile Glu Met Ala Arg Thr Met Leu Asp Glu Tyr Lys

```

```

                20                25                30
Thr Pro Arg Lys Phe Trp Pro Glu Ala Ile Asp Thr Ala Cys His Thr
      35                40                45
Ile Asn Arg Val Tyr Leu His Lys Val Leu Glu Lys Thr Ser Tyr Glu
      50                55                60
Phe Leu Thr Gly Lys Lys Pro Asn Val Ser Tyr Phe Arg Val Phe Gly
      65                70                75                80
Ala Arg Cys Trp Ile Lys Asp Pro His His Thr Ser Lys Phe Ala Pro
      85                90                95
Lys Ala His Glu Gly Phe Met Leu Gly Tyr Gly Lys Asp Ser His Ser
      100                105                110
Tyr Arg Val Phe Asn Leu Phe His Tyr Lys Val Val Gln Thr Val Asp
      115                120                125
Val Arg
      130

```

```

<210> 705
<211> 513
<212> DNA
<213> Homo sapiens

```

```

<400> 705
acgcgtatatt cgtccaaatg attcaaatca aaacgccgcc gttaaaaacg atgcaggcga
60
agacaatgcg aataaaaaag gtggtaaata agcatgagtt ttaaatgac acaatctcaa
120
tacacaagtc tttatggacc aactgtagga gactccgtga gattaggaga tacgaacttg
180
ttgcacaaag ttgagaaaga ctatgcaaatt tatggggatg aagctacttt cgggtggcga
240
aaatcaattc gtgatggtat gggtcaaaat cctaatgtga caagagatga taaaaatgta
300
gccgatttag ttttaactaa cgcattaatt attgattatg acaagattgt taaagcagat
360
atcgggtatta aaaatgggta tatttttaag attggtaaag ctggaacccc agatataatg
420
gataacgttg acatcatcat tgggtgaaca actgatatta ttgctgctga aggtaaaatt
480
gttactgcgc gcggtatcga tacacacgtg cac
513

```

```

<210> 706
<211> 140
<212> PRT
<213> Homo sapiens

```

```

<400> 706
Met Ser Phe Lys Met Thr Gln Ser Gln Tyr Thr Ser Leu Tyr Gly Pro
1          5          10          15
Thr Val Gly Asp Ser Val Arg Leu Gly Asp Thr Asn Leu Phe Ala Gln
      20          25          30
Val Glu Lys Asp Tyr Ala Asn Tyr Gly Asp Glu Ala Thr Phe Gly Gly
      35          40          45
Gly Lys Ser Ile Arg Asp Gly Met Ala Gln Asn Pro Asn Val Thr Arg

```

```

      50              55              60
Asp Asp Lys Asn Val Ala Asp Leu Val Leu Thr Asn Ala Leu Ile Ile
65              70              75              80
Asp Tyr Asp Lys Ile Val Lys Ala Asp Ile Gly Ile Lys Asn Gly Tyr
      85              90              95
Ile Phe Lys Ile Gly Lys Ala Gly Asn Pro Asp Ile Met Asp Asn Val
      100             105             110
Asp Ile Ile Ile Gly Ala Thr Thr Asp Ile Ile Ala Ala Glu Gly Lys
      115             120             125
Ile Val Thr Ala Gly Gly Ile Asp Thr His Val His
      130             135             140

<210> 707
<211> 409
<212> DNA
<213> Homo sapiens

<400> 707
acgcgtggca tcctcagacc accaaagaca atcctgtcct gggaggcagg gagaagccg
60
gcacactaca cagtgccagc gtgaagccct caggggggtcc tggagcaggg ccacctccct
120
gggggatccc caggtgccat tttcatggca gtgtctatgg acggctcccc ttggcatggt
180
gctgggtggc aatcctggct gtagctgccca cccctgccc tttttgtctt cctccgaggg
240
cattgtgatc atcagtgtga gtctgttggg aaggagagcc aggtccccag gtttgggaaa
300
ggagtagggg ttcccagcct gtctggccat cacccccag cccagcccct cctgctgggt
360
gacgtgctca gttcggcccc tgctgtactg ggagggggct aggagcata
409

<210> 708
<211> 136
<212> PRT
<213> Homo sapiens

<400> 708
Met Leu Leu Ala Pro Ser Gln Tyr Ser Arg Gly Arg Thr Glu His Val
1              5              10              15
Thr Gln Gln Glu Gly Leu Gly Trp Gly Val Met Ala Arg Gln Ala Gly
      20              25              30
Lys Pro Tyr Ser Phe Pro Lys Pro Gly Asp Leu Ala Leu Leu Pro Asn
      35              40              45
Arg Leu Thr Leu Met Ile Thr Met Pro Ser Glu Gly Ser Lys Lys Gly
      50              55              60
Arg Gly Trp Gln Leu Gln Pro Gly Leu Pro Pro Ser Thr Met Pro Arg
65              70              75              80
Gly Ala Val His Arg His Cys His Glu Asn Gly Thr Trp Gly Ser Pro
      85              90              95
Arg Glu Val Ala Leu Leu Gln Asp Pro Leu Arg Ala Ser Pro Val His
      100             105             110
Cys Val Val Cys Arg Leu Ser Pro Cys Leu Pro Gly Gln Asp Cys Leu

```



```

      115                      120                      125
Trp Trp Ser Glu Asp Ala Thr Arg
      130                      135

<210> 709
<211> 771
<212> DNA
<213> Homo sapiens

<400> 709
acgcgtctga cggagagcct cctgagtctc cccacgcaga ggactcagaa agggaatcgg
60
tgaccacacc tgggccagcg acgtgtggtg cgccagcctc cccagcggat cacctcctcc
120
tccccctcca ggaggagagt ttctccgaag tccccatgag tgaagcaagc tcagcgaaag
180
acactccact ctttaggatg gagggagagg atgcccttgt gactcagtat cagagcaaaag
240
ccagtgaacca cgaagggtta ttgtctgacc ccttgagtga ccttcagttg gtctcagatt
300
ttaaactctcc aatcatggcc gatctgaact taagccttcc ttccattcct gaagtgcgat
360
cggatgatga aagaatagat caggttgaag atgacggaga tcaggttgaa gatgatggag
420
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480
gtcctgagag gggaaagggg cccagtggcg aggcagatag gttggtactg ggggagggcc
540
tgtgtgattt caggctgcaa gcaccccagg catctgtgac agctccttca gagcagacca
600
cagagttcgg aattcacaaa ccacatcttg gcaagagctc aagcttggat aaacagctgc
660
caggcccccag tgggtggtgag gaagaaaaac cgatgggaaa tgggagtcga agccccctc
720
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771

<210> 710
<211> 205
<212> PRT
<213> Homo sapiens

<400> 710
Met Ser Glu Ala Ser Ser Ala Lys Asp Thr Pro Leu Phe Arg Met Glu
1 5 10 15
Gly Glu Asp Ala Leu Val Thr Gln Tyr Gln Ser Lys Ala Ser Asp His
20 25 30
Glu Gly Leu Leu Ser Asp Pro Leu Ser Asp Leu Gln Leu Val Ser Asp
35 40 45
Phe Lys Ser Pro Ile Met Ala Asp Leu Asn Leu Ser Leu Pro Ser Ile
50 55 60
Pro Glu Val Ala Ser Asp Asp Glu Arg Ile Asp Gln Val Glu Asp Asp
65 70 75 80
Gly Asp Gln Val Glu Asp Asp Gly Glu Thr Ala Lys Ser Ser Thr Leu

```

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      85              90              95
Asp Ile Gly Ala Leu Ser Leu Gly Leu Val Val Pro Cys Pro Glu Arg
      100              105              110
Gly Lys Gly Pro Ser Gly Glu Ala Asp Arg Leu Val Leu Gly Glu Gly
      115              120              125
Leu Cys Asp Phe Arg Leu Gln Ala Pro Gln Ala Ser Val Thr Ala Pro
      130              135              140
Ser Glu Gln Thr Thr Glu Phe Gly Ile His Lys Pro His Leu Gly Lys
      145              150              155
Ser Ser Ser Leu Asp Lys Gln Leu Pro Gly Pro Ser Gly Gly Glu Glu
      165              170              175
Glu Lys Pro Met Gly Asn Gly Ser Pro Ser Pro Pro Gly Thr Ser
      180              185              190
Leu Asp Asn Pro Val Pro Ser Pro Ser Pro Ser Glu Ile
      195              200              205

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<210> 711
 <211> 432
 <212> DNA
 <213> Homo sapiens

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<400> 711
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120
aatgtgcccc ctttatttgc acttgcatgg aatatgatta tgaacacagt tttatcatt
180
gatgaccacc ccgttatcag gttggcgatt cgtatgttgt tggaacacga ggggtataag
240
gtcgtttggg aaacggacaa cggttgtgac gcgatccaaa tggttcgcga atgcctgccg
300
gacctgatca tcctggatat cagcatcccc aaactcgacg gcttcgaagt gctctgccga
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420
ttcgccacgc gt
432

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<210> 712
 <211> 93
 <212> PRT
 <213> Homo sapiens

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<400> 712
Met Ile Met Asn Thr Val Phe Ile Ile Asp Asp His Pro Val Ile Arg
1      5      10      15
Leu Ala Ile Arg Met Leu Leu Glu His Glu Gly Tyr Lys Val Val Gly
20     25     30
Glu Thr Asp Asn Gly Cys Asp Ala Ile Gln Met Val Arg Glu Cys Leu
35     40     45
Pro Asp Leu Ile Ile Leu Asp Ile Ser Ile Pro Lys Leu Asp Gly Leu
50     55     60
Glu Val Leu Cys Arg Phe Asn Ala Met Asn Thr Ser Met Lys Thr Leu

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65              70              75              80
Ile Leu Thr Ala Gln Ser Pro Thr Leu Phe Ala Thr Arg
      85              90

<210> 713
<211> 465
<212> DNA
<213> Homo sapiens

<400> 713
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atgcgcatgg aaatgaccga ctctgccgcg gtgatcttca acccggtggc gcaggccaag
120
ttcgtgcata cggtcagcgc gggctacgtg gccggcgcca tgttcgtcat gtcgatcagc
180
gcctggtacc tgctcaaggg ccgccacacc gacctggcca agcgctcgat ggcggtcgcc
240
gccagcttcg gcctggcgtc ggcgctgctg gtcgctgtgc tgggtgacga aagcggttat
300
ctcaccacgc aacaccagaa gatgaagatc gcggccatgg aatccatgtg gcacaccgag
360
ccggcgccgc cgtccttcaa cctgatcgcg ctgcccaacc aggcgaacg caagaacgac
420
ttcgccatcg agattcccta cgtcatgngc ctcatcgcca cgcgt
465

<210> 714
<211> 155
<212> PRT
<213> Homo sapiens

<400> 714
Ile Leu Ile Ala Asn Gly Gly Met Gln Asn Pro Val Gly Ala Val Phe
1      5      10      15
Asn Pro Asp Thr Met Arg Met Glu Met Thr Asp Phe Ala Ala Val Ile
20     25     30
Phe Asn Pro Val Ala Gln Ala Lys Phe Val His Thr Val Ser Ala Gly
35     40     45
Tyr Val Ala Gly Ala Met Phe Val Met Ser Ile Ser Ala Trp Tyr Leu
50     55     60
Leu Lys Gly Arg His Thr Asp Leu Ala Lys Arg Ser Met Ala Val Ala
65     70     75     80
Ala Ser Phe Gly Leu Ala Ser Ala Leu Ser Val Val Val Leu Gly Asp
85     90     95
Glu Ser Gly Tyr Leu Thr Thr Glu His Gln Lys Met Lys Ile Ala Ala
100    105    110
Met Glu Ser Met Trp His Thr Glu Pro Ala Pro Ala Ser Phe Asn Leu
115    120    125
Ile Ala Leu Pro Asn Gln Ala Glu Arg Lys Asn Asp Phe Ala Ile Glu
130    135    140
Ile Pro Tyr Val Met Xaa Leu Ile Gly Thr Arg
145    150    155

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<210> 715
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 715
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 cagaccggcc tgctgcctca ggcactgggt cgtttgcgcc aggcagcgcc gacggtggag
 120
 tgcaagtggg taccgggggt ttccctggag ttgctcagcc aggtggagcg aggcgagctg
 180
 gactcgggca tcatcattcg cccgcccttt gatttgccca aggagtgtga cgtacaggta
 240
 ctgcgcaagg agccgtttgt gttgatcgtg cccagggcgg tcgggggtga tgaccggttg
 300
 caactgctcg aagctcatcc ccacgtgcgc tacgaccgcg ctctgtttgg cggg
 354

<210> 716
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 716
 Xaa Pro Val Asp Ala Asn Glu Tyr Arg Gly Glu Leu Lys Val Gly Ala
 1 5 10 15
 Ile Thr Thr Ala Gln Thr Gly Leu Leu Pro Gln Ala Leu Val Arg Leu
 20 25 30
 Arg Gln Ala Ala Pro Thr Val Glu Cys Lys Leu Val Pro Gly Val Ser
 35 40 45
 Leu Glu Leu Leu Ser Gln Val Asp Ala Gly Glu Leu Asp Ser Ala Ile
 50 55 60
 Ile Ile Arg Pro Pro Phe Asp Leu Pro Lys Glu Leu His Val Gln Val
 65 70 75 80
 Leu Arg Lys Glu Pro Phe Val Leu Ile Val Pro Gln Ala Val Gly Gly
 85 90 95
 Asp Asp Pro Leu Gln Leu Leu Glu Ala His Pro His Val Arg Tyr Asp
 100 105 110
 Arg Ala Ser Phe Gly Gly
 115

<210> 717
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 717
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 ccgttaagtc atctaaatag gccattctgt ggctctccat cagtaagaac caaatccata
 120
 ggagaagttg agcggatagt aatgcatcaa attgatgctg agaaaccgaa aaatgggaca
 180

atataatcaa gctgacaata ctgatcaaac cactcgcacg aaagctacta ccgcttgacc
 240
 accaagcaga aaaaaccaat gaaatgctta aaaataaaat cgtccaaagt aaaaagctag
 300
 accaggtggt agccagatta aaaataggcc gctctagaaa atgaaaagaa atccaatgag
 360
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 401

<210> 718

<211> 130

<212> PRT

<213> Homo sapiens

<400> 718

Met Leu Leu Cys Trp Cys Tyr Ala Val Glu Ser His Trp Ile Ser Phe
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 His Phe Leu Glu Arg Pro Ile Phe Asn Leu Ala Thr Thr Trp Ser Ser
 20 25 30
 Phe Leu Leu Trp Thr Ile Leu Phe Leu Ser Ile Ser Leu Val Phe Ser
 35 40 45
 Ala Trp Trp Ser Ser Gly Ser Ser Phe His Ala Ser Gly Leu Ile Ser
 50 55 60
 Ile Val Ser Leu Ile Ile Leu Ser His Phe Ser Val Ser Gln His Gln
 65 70 75 80
 Phe Asp Ala Leu Leu Ser Ala Gln Leu Leu Trp Ile Trp Phe Leu
 85 90 95
 Leu Met Glu Ser His Arg Met Ala Tyr Leu Asp Asp Leu Thr Ala Leu
 100 105 110
 Pro Gly Arg Arg Ala Leu Asn Glu Lys Leu Val Gly Leu Pro Lys Arg
 115 120 125
 Tyr Ala
 130

<210> 719

<211> 685

<212> DNA

<213> Homo sapiens

<400> 719

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 ctcttgaaag cggattttca taggcgctgc gcctctcata ttcaagcatc aaggcaatcc
 120
 aatctccctg cgttggtaac tgggcataag aaagacctct cgactccagc aacctcatcg
 180
 tgcaaatgcc gtggcggtgt caactctgac ggcttggaag ctgcagacct tgtcaaagga
 240
 cctcggccga aattcaccct tgatctcttt gtcttgtcca actcttgtcc ctgagaatga
 300
 aactgtcttc tgagagtcca tcaatgcgac gctgactcgt gagaagtgtc gaatcacgtc
 360
 gccattttgg agacctgcc acgcagctct ggaacctgcc aggacgcctt ccacaacacc
 420

agaacgcagc gactttgcgt taaatccaag ctcaaacacc tcttgctcca caggcctgag
 480
 cataaaaagg tattctcgga cgggaaatgt aaagtctgag cttaggtgca gactaccgcc
 540
 atcgatcagt gtctgatact gcttgctcgc gacttctttg ccgagcaatg ggtatagcgt
 600
 tttcaaccaa gtggaagcag tcgtttgctc accctggcga ttccggcgag ttagggacat
 660
 gaccacgtca tcgatgggat ttgct
 685

<210> 720

<211> 161

<212> PRT

<213> Homo sapiens

<400> 720

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Thr	Trp	Leu	Lys	Thr	Leu	Tyr	Pro	Leu	Leu	Gly	Lys	Glu	Val	Ala	Asp
			20						25				30		
Lys	Gln	Tyr	Gln	Thr	Leu	Ile	Asp	Gly	Gly	Thr	Leu	His	Leu	Ser	Ser
			35				40					45			
Asp	Phe	Thr	Phe	Pro	Val	Ala	Glu	Tyr	Leu	Phe	Met	Leu	Arg	Pro	Val
			50			55					60				
Glu	Gln	Glu	Val	Phe	Glu	Leu	Gly	Phe	Asn	Ala	Lys	Ser	Leu	Arg	Ser
					70				75					80	
Gly	Val	Val	Glu	Gly	Val	Leu	Ala	Gly	Ser	Arg	Ala	Ala	Leu	Ala	Gly
				85				90						95	
Leu	Gln	Asn	Gly	Asp	Val	Ile	Gln	His	Phe	Ser	Arg	Val	Ser	Val	Ala
			100					105					110		
Leu	Met	Asp	Ser	Gln	Lys	Thr	Val	Ser	Phe	Ser	Gly	Thr	Arg	Val	Gly
			115				120					125			
Gln	Asp	Lys	Glu	Ile	Lys	Gly	Glu	Phe	Arg	Pro	Arg	Ser	Phe	Asp	Lys
			130			135					140				
Val	Cys	Ser	Phe	Gln	Ala	Val	Arg	Val	Asp	His	Ala	Thr	Ala	Phe	Ala
					150					155					160
Arg															

<210> 721

<211> 579

<212> DNA

<213> Homo sapiens

<400> 721

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 120
 aggaacgcct tcagggtggc tgaagtctgg atggatgaat taaaagcca cgtctactgg
 180
 catggaacat accaggagga ctcaggaatt gacattgggg acatcactgc aaggaaggct
 240

ctcaggaaac agctgcagtg caagaccttc cgggtgtacc tggtcagcgt gtacccagag
 300
 atgaggatgt actccgacat cattgcctat ggagtgtctgc agaattctct gaagactgat
 360
 ttgtgtcttg accaggggcc agatacagag aatgtcccca tcatgtacat ctgccatggg
 420
 atgacgcctc agaacgtgta ctacacgagc agtcagcaga tccatgtggg cattctgagc
 480
 cccaccgtgg atgatgatga caaccgatgc ctggtggagc tcaacagccg gcccccggctc
 540
 atcgaatgca gctacgcca agccaagagg atgaagctt
 579

<210> 722

<211> 193

<212> PRT

<213> Homo sapiens

<400> 722

Lys Leu Gly Ile Arg Val Trp Gln Cys Gly Gly Ser Val Glu Val Leu
 1 5 10 15
 Pro Cys Ser Arg Ile Ala His Ile Glu Arg Ala His Lys Pro Tyr Thr
 20 25 30
 Glu Asp Leu Thr Ala His Val Arg Arg Asn Ala Leu Arg Val Ala Glu
 35 40 45
 Val Trp Met Asp Glu Phe Lys Ser His Val Tyr Trp His Gly Thr Tyr
 50 55 60
 Gln Glu Asp Ser Gly Ile Asp Ile Gly Asp Ile Thr Ala Arg Lys Ala
 65 70 75 80
 Leu Arg Lys Gln Leu Gln Cys Lys Thr Phe Arg Trp Tyr Leu Val Ser
 85 90 95
 Val Tyr Pro Glu Met Arg Met Tyr Ser Asp Ile Ile Ala Tyr Gly Val
 100 105 110
 Leu Gln Asn Ser Leu Lys Thr Asp Leu Cys Leu Asp Gln Gly Pro Asp
 115 120 125
 Thr Glu Asn Val Pro Ile Met Tyr Ile Cys His Gly Met Thr Pro Gln
 130 135 140
 Asn Val Tyr Tyr Thr Ser Ser Gln Gln Ile His Val Gly Ile Leu Ser
 145 150 155 160
 Pro Thr Val Asp Asp Asp Asn Arg Cys Leu Val Asp Val Asn Ser
 165 170 175
 Arg Pro Arg Leu Ile Glu Cys Ser Tyr Ala Lys Ala Lys Arg Met Lys
 180 185 190
 Leu

<210> 723

<211> 384

<212> DNA

<213> Homo sapiens

<400> 723

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 60

ctcaacgaaa tgctctcgct taaaccgtgc gaaggaaccc caccgcaatg gcgcttatcc
 120
 cggaaggagg attaccaaat gcgcattgat acgcgctccg gaacgcctac gctgatgctt
 180
 accgtacaaa gtgtaaccga caaacctggt acggacgtca ctcgacaatg tcctaaatgg
 240
 gacggcaagc ccctcacct tgacgtaacg aatacattcc cggaaggctc cgtcgtagca
 300
 gacttctaca gcaagcaaac cgctatgggt cagcaaggta aaatcacact tcagcctgccc
 360
 gctaacagca atggcctgct gctg
 384

<210> 724

<211> 128

<212> PRT

<213> Homo sapiens

<400> 724

Thr	Arg	Pro	Leu	Thr	Leu	Ser	Phe	Asp	Asn	Ala	Cys	Trp	Gln	Pro	Thr
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Glu	Ala	Val	Lys	Leu	Asn	Glu	Met	Leu	Ser	Leu	Lys	Pro	Cys	Glu	Gly
		20					25				30				
Thr	Pro	Pro	Gln	Trp	Arg	Leu	Phe	Arg	Glu	Gly	Asp	Tyr	Gln	Met	Arg
	35				40						45				
Ile	Asp	Thr	Arg	Ser	Gly	Thr	Pro	Thr	Leu	Met	Leu	Thr	Val	Gln	Ser
	50				55					60					
Val	Thr	Asp	Lys	Pro	Val	Thr	Asp	Val	Thr	Arg	Gln	Cys	Pro	Lys	Trp
65			70					75					80		
Asp	Gly	Lys	Pro	Leu	Thr	Leu	Asp	Val	Thr	Asn	Thr	Phe	Pro	Glu	Gly
		85					90					95			
Ser	Val	Val	Arg	Asp	Phe	Tyr	Ser	Lys	Gln	Thr	Ala	Met	Val	Gln	Gln
	100						105					110			
Gly	Lys	Ile	Thr	Leu	Gln	Pro	Ala	Ala	Asn	Ser	Asn	Gly	Leu	Leu	Leu
	115					120						125			

<210> 725

<211> 521

<212> DNA

<213> Homo sapiens

<400> 725

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 120
 gaaaataggt ttccttcttc cacaggcatg gagaaggaag gaaattttgc actggccttt
 180
 gggaagctga agaagagctg gggggaggct tggtctgaca aaatagtgc tctctccctg
 240
 ctgaaatgt cccacagaag gctgtttctg gttcacattt gccctctag gtcaccctcc
 300
 tccccctcat cctgctcact gccagagaga ctatgctggg agtgggtgcat cggtggtctc
 360

caggcccttt taggctcaag gtgttcattc cctggctcct tccctgccat gtctttgttc
 420
 cttctcctc ctttcccatc ccagcagcca cctcctcct tccaccagac ctgggaacca
 480
 tcatcccaac cacaatcacc ccgtggttct attacacgcy t
 521

<210> 726

<211> 124

<212> PRT

<213> Homo sapiens

<400> 726

Met	Glu	Lys	Glu	Gly	Asn	Phe	Ala	Leu	Ala	Phe	Gly	Lys	Leu	Lys	Lys
1				5					10					15	
Ser	Trp	Gly	Glu	Ala	Cys	Ser	Asp	Lys	Ile	Val	Thr	Leu	Ser	Leu	Leu
			20					25					30		
Glu	Met	Ser	His	Arg	Arg	Leu	Phe	Leu	Val	His	Ile	Cys	Pro	Ser	Arg
			35				40					45			
Ser	Thr	Pro	Ser	Pro	Ser	Ser	Cys	Ser	Leu	Pro	Glu	Arg	Leu	Cys	Trp
	50					55				60					
Glu	Trp	Cys	Ile	Gly	Gly	Leu	Gln	Ala	Leu	Leu	Gly	Ser	Arg	Cys	Ser
	65				70					75				80	
Phe	Pro	Gly	Ser	Phe	Pro	Ala	Met	Ser	Leu	Phe	Leu	Pro	Pro	Ser	Phe
				85					90					95	
Pro	Ser	Gln	Gln	Pro	Pro	Ser	Ser	Phe	His	Gln	Thr	Trp	Glu	Pro	Ser
			100						105				110		
Ser	Gln	Pro	Gln	Ser	Pro	Arg	Gly	Ser	Ile	Thr	Arg				
			115				120								

<210> 727

<211> 629

<212> DNA

<213> Homo sapiens

<400> 727

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 180
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 240
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 420
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 480
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 540

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 629

<210> 728
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 728
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 20 25 30
 Ser Val Glu Leu Met Leu Asn Ala Ala Asn Leu Ala Leu Val Thr Phe
 35 40 45
 Ala His Val His Gly Ser Leu Asp Gly Gln Val Gly Val Phe Phe Val
 50 55 60
 Met Ile Val Ala Ala Ala Glu Val Val Val Gly Leu Ala Ile Ile Val
 65 70 75 80
 Thr Ile Phe Arg Ser Arg Arg Thr Thr Ser Val Asp Asp Thr Asn Leu
 85 90 95
 Leu Lys Phe

<210> 729
 <211> 4716
 <212> DNA
 <213> Homo sapiens

<400> 729
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 120
 ggagaatgta ttcttttgat gatgtgctgg aggaaggaaa gcgacccctt acaatgactg
 180
 tgtcagaagc aagtaccag agtgagagag tagaagagaa gggagcaact tattcttcag
 240
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 300
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 360
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 420
 cggaaaactg atacagtcag gttaacatct gtggtcacac caagaccctt tggctctcag
 480
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 540
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 600
 ccggacgcaa gccaaactggc ttcaagetta tctagccaga aagaggtagc agcaacagaa
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gaagatgtga caaggctgcc ctctcctaca tcccccttct catctctttc ccaagaccag
720
gctgccactt ctaaagccac attgtcttcc acatctgggc ttgatttaac gtctgaatct
780
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900
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960
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1020
tcaaaagagt gggaggaagc catggctaag gctcaagaaa ctggacacct agtgatggat
1080
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1140
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1260
gaatcaaaag catctgaatc catttctttg aaaaacttaa aaaggcgatc acaatttttt
1320
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1380
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1440
caggaccgcc tactgcagga aaaatatcaa cgtgagcagg agaaactgag ggaagagtgg
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1680
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1800
aagcggcttc aggcgtgagg tgaggagcag aagcgtcctg cggaggagca gaagcgccag
1860
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<211> 797

<212> PRT

<213> Homo sapiens

<400> 730

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<213> Homo sapiens

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<213> Homo sapiens

<400> 734

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Arg	His	Asp	Ala	His	Leu	Leu	Ile	Thr	Asn	Ser	Ile	Lys	Asn	Asp	Leu
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  305              310              315              320
Ser Asp Arg Asn Ile Arg Tyr Val Ala Leu Thr Ser Leu Leu Arg Leu
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agcgcgcgac attctgctga cacacgtgtt cggatcagag accggagctg ccacgctcga
300
cgtggatttc gccgttgccg tagaacattg gccgcagttc gaaaacatca agcagcacct
360
gctagccaac gaccatttcg actctgccgc cagcatcacc catcgactgc tctatcgcac
420
gagcgacaac acgatcgccc ggccaatcga tctcatccca ttcggcggca tcgaacagcc
480
gccagccacc atcaaatggc cgcccagcat ggctgtcatg atgaatgttg ctggctacgc
540
agatgccttg cgggcccagc tcgaagtaga gtttgtgccc gggcgcagca tacgcgt
597

```

<210> 736

<211> 175

<212> PRT

<213> Homo sapiens

<400> 736

```

Met Asp Ser Arg Asn Leu Glu Thr Ala Asn Leu Ile Pro Glu Lys Ile
  1              5              10              15
Ile Ala Trp Cys Pro Arg Ser Arg Ser Asp Arg Pro Leu Asp Arg Ser
      20              25              30
Thr Gln Asp Ile Leu Ser Ala Ile His Asp Val Ala Ala Pro Leu Ala
      35              40              45
Leu Pro Ile Phe Val Val Gly Ala Thr Ala Arg Asp Ile Leu Leu Thr
      50              55              60
His Val Phe Gly Ile Glu Thr Gly Arg Ala Thr Leu Asp Val Asp Phe

```

```

65          70          75          80
Ala Val Ala Val Glu His Trp Pro Gln Phe Glu Asn Ile Lys Gln His
      85          90          95
Leu Leu Ala Asn Asp His Phe Asp Ser Ala Ala Ser Ile Thr His Arg
      100          105          110
Leu Leu Tyr Arg Thr Ser Asp Asn Thr Ile Ala Arg Pro Ile Asp Leu
      115          120          125
Ile Pro Phe Gly Gly Ile Glu Gln Pro Pro Ala Thr Ile Lys Trp Pro
      130          135          140
Pro Asp Met Ala Val Met Met Asn Val Ala Gly Tyr Ala Asp Ala Trp
      145          150          155          160
Arg Ala Ala Val Glu Val Glu Phe Val Pro Gly Arg Ser Ile Arg
      165          170          175

```

<210> 737

<211> 497

<212> DNA

<213> Homo sapiens

<400> 737

```

ntgcgcctcgg ccaattccgg cgccatcctc gggcacgacg tggggaaaaa ctccatgggt
60
cgcgccgggca tcgttgggta cggatacgcg cccaaccctc acgccgacgc tgccgacctc
120
caccctgccc tgcctcggat cagccacgac accttcgtta aaactgtcag tgtggggggt
180
accatcggtc acggcagaac atggacagcc agcgaaacga caaaaatcgc caccgtccca
240
gtcgggttacg ccgacggact gtcccaggga ctgtcaaata aaggacacgt tctcattaga
300
gggtccgttc atcccatcgt cggtcggatc tgcattggacc aattcatggt cgatcttggc
360
ccgattcga acgtcacggt gggagatgag gtggtgctca ttggaaccca ggaggacgaa
420
actctgacgc ctgatgacat ggccgaactc ctcggaacca ttagctacga gatcattgtc
480
gccatttcca aacgcgt
497

```

<210> 738

<211> 165

<212> PRT

<213> Homo sapiens

<400> 738

```

Xaa Arg Leu Ala Asn Ser Gly Ala Ile Leu Gly His Asp Leu Gly Lys
1          5          10          15
Thr Ser Met Val Arg Ala Gly Ile Val Gly Tyr Gly Tyr Asp Pro Asn
      20          25          30
Pro His Ala Asp Arg Ala Asp Leu His Pro Ala Leu Ser Trp Ile Ser
      35          40          45
His Val Thr Phe Val Lys Thr Val Ser Val Gly Asp Thr Ile Gly Tyr
      50          55          60
Gly Arg Thr Trp Thr Ala Ser Glu Thr Thr Lys Ile Ala Thr Val Pro

```

```

65          70          75          80
Val Gly Tyr Ala Asp Gly Leu Ser Arg Gly Leu Ser Asn Lys Gly His
      85          90          95
Val Leu Ile Arg Gly Ser Val His Pro Ile Val Gly Arg Ile Cys Met
      100         105         110
Asp Gln Phe Met Val Asp Leu Gly Pro Asp Ser Asn Val Thr Val Gly
      115         120         125
Asp Glu Val Val Leu Ile Gly Thr Gln Glu Asp Glu Thr Leu Thr Ala
      130         135         140
Asp Asp Met Ala Glu Leu Leu Gly Thr Ile Ser Tyr Glu Ile Thr Cys
145          150          155          160
Ala Ile Ser Lys Arg
      165

```

<210> 739

<211> 438

<212> DNA

<213> Homo sapiens

<400> 739

```

cggtgcggg aagagcgggc gcacgcgctc aagaccaagg aaaagctggc acagaccggc
60
acggcctcat cagcagctgt gggctcaggc cccctcccg aggcggagca ggcgtggcgg
120
cagagcagcg gggaggagga gctgcagctc cagctggccc tggccatgag caaggaggag
180
gccgaccagc ccccgctctg cggccccgag gacgacgccc agctccagct ggcccttagt
240
ttgagccgag aagagcatga taaggaggag cggatccgct gcggggatga cctgcggcgtg
300
cagatggcaa tcgaggagag caagaggagg actggggggc aggaggagtc gtcctcatg
360
gaccttgctg acgtcttcac gcccccagct cctgccccga ccacagaccc ctggggggggc
420
ccagcaccca tggctgct
438

```

<210> 740

<211> 146

<212> PRT

<213> Homo sapiens

<400> 740

```

Arg Leu Arg Glu Glu Arg Ala His Ala Leu Lys Thr Lys Glu Lys Leu
1      5      10      15
Ala Gln Thr Ala Thr Ala Ser Ser Ala Val Gly Ser Gly Pro Pro
      20      25      30
Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu Glu Leu
      35      40      45
Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp Gln Pro
      50      55      60
Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln Leu Gln Leu Ala Leu Ser
65      70      75      80
Leu Ser Arg Glu Glu His Asp Lys Glu Glu Arg Ile Arg Arg Gly Asp

```

```

      85              90              95
Asp Leu Arg Leu Gln Met Ala Ile Glu Glu Ser Lys Arg Glu Thr Gly
      100              105              110
Gly Lys Glu Glu Ser Ser Leu Met Asp Leu Ala Asp Val Phe Thr Pro
      115              120              125
Pro Ala Pro Ala Pro Thr Thr Asp Pro Trp Gly Gly Pro Ala Pro Met
      130              135              140
Ala Ala
145

<210> 741
<211> 726
<212> DNA
<213> Homo sapiens

<400> 741
gctctctccc gaccgcgttg ttgtaaggat gtcgcgacgg tgcgcaaaaa tgaatatgtg
60
aatttgcggg tcactctgct cgctggggccc actgctagcg gaaaatcagg gctagcgggtg
120
cgagtgtgcc gccgcttgta tgctgatgag caccgccgag aaattattaa tactgactcg
180
atgggtgtgt atcgccggat ggacattggc actgccaccc ctacactgcg cgagcagcgc
240
acggtatgac atcacctggt gtcgattctt gatgtgactg tgccctcctc gctagtactg
300
atgcagacgc tggcccgtag tgccgtcgag gattgtctgt gcgctgggtg catccctgtc
360
ttggtgggag ggtctgcgct gtacaccaag gccatcattg acgaaatgtc catcccgcca
420
actgatccgg aagtgaagggc tcggtggcag gagaagctag atgccgaggg gccgcgagtt
480
ctgcatgacg agcttgcccc tcgcatcccc aaggcggctg agtcaatctt gcccggaac
540
ggcaggcgaa tcgtttcgtg ccctcgaagt ttattgaccc tgacagggtc ctttactgcc
600
accgatcccc gacgggaccc tccactggcc aagacgggtg aaatgggctt agaactgtcg
660
cgcaaagaca tagaccagcg tattgccgat cggggtgacc agatgtgggc atacggtttc
720
gtcgac
726

<210> 742
<211> 242
<212> PRT
<213> Homo sapiens

<400> 742
Ala Ser Leu Arg Pro Arg Cys Cys Lys Asp Val Ala Thr Val Arg Lys
1 5 10 15
Asn Glu Tyr Val Asn Leu Pro Val Ile Cys Leu Val Gly Pro Thr Ala
20 25 30
Ser Gly Lys Ser Gly Leu Ala Val Arg Val Cys Arg Arg Leu Tyr Val

```

```

      35              40              45
Asp Glu His Pro Ala Glu Ile Ile Asn Thr Asp Ser Met Val Val Tyr
  50              55              60
Arg Gly Met Asp Ile Gly Thr Ala Thr Pro Thr Leu Arg Glu Gln Arg
  65              70              75              80
Thr Val Val His His Leu Val Ser Ile Leu Asp Val Thr Val Pro Ser
      85              90              95
Ser Leu Val Leu Met Gln Thr Leu Ala Arg Asp Ala Val Glu Asp Cys
      100              105              110
Leu Ser Arg Gly Val Ile Pro Val Leu Val Gly Gly Ser Ala Leu Tyr
      115              120              125
Thr Lys Ala Ile Ile Asp Glu Met Ser Ile Pro Thr Asp Pro Glu
      130              135              140
Val Arg Ala Arg Trp Gln Glu Lys Leu Asp Ala Glu Gly Pro Arg Val
      145              150              155              160
Leu His Asp Glu Leu Ala Arg Arg Asp Pro Lys Ala Ala Glu Ser Ile
      165              170              175
Leu Pro Gly Asn Gly Arg Arg Ile Val Ser Cys Pro Arg Ser Leu Leu
      180              185              190
Thr Leu Thr Gly Ser Phe Thr Ala Thr Asp Pro Arg Arg Asp Pro Pro
      195              200              205
Leu Ala Lys Thr Val Gln Met Gly Leu Glu Leu Ser Arg Lys Asp Ile
      210              215              220
Asp Gln Arg Ile Ala Asp Arg Val Asp Gln Met Trp Ala Tyr Gly Phe
      225              230              235              240
Val Asp

```

<210> 743

<211> 430

<212> DNA

<213> Homo sapiens

<400> 743

```

naaaaaagtg atgggtttcgg atctgtggcc agtcgtcttg caagaaatca ttatgacgtg
  60
gatgagggca acagcancat tcatgttaat caagacattg cgcgcagaac agggacggga
  120
aagctattgg tacgagtgtg cccggcgcac gtgtactcag aggagcccga tggcactatt
  180
tccgtggagt acgcagcgtg tctggagtgt ggcaactgtc tggcggttgc tgcgccaggg
  240
tcgcttgaat ggcaactatcc cgcaggtgca atgggtatatt cggtccagaga aggatgaagt
  300
ccttgtgggc gactgtaaag cgacatggcc gtcgctcggg aggaggaatt gtggtgtccg
  360
caccaaaatg tgctcaggat gaagttcgtc atggaaaatc ggctccaacc gtttcggggg
  420
ctggtcgcga
  430

```

<210> 744

<211> 98

<212> PRT

<213> Homo sapiens

<400> 744

Xaa Lys Ser Asp Gly Phe Gly Ser Val Ala Ser Arg Leu Ala Arg Asn
 1 5 10 15
 His Tyr Asp Val Asp Glu Gly Asn Ser Xaa Ile His Val Asn Gln Asp
 20 25 30
 Ile Ala Arg Arg Thr Gly Thr Gly Lys Leu Leu Val Arg Val Cys Pro
 35 40 45
 Ala His Val Tyr Ser Glu Glu Pro Asp Gly Thr Ile Ser Val Glu Tyr
 50 55 60
 Ala Ala Cys Leu Glu Cys Gly Thr Cys Leu Ala Val Ala Ala Pro Gly
 65 70 75 80
 Ser Leu Glu Trp His Tyr Pro Ala Gly Ala Met Gly Ile Ser Phe Arg
 85 90 95
 Glu Gly

<210> 745

<211> 362

<212> DNA

<213> Homo sapiens

<400> 745

cggccgattg aagcgctgct gcggtttgag tcggtgatgg atcgcggtgga cggtgcttcg
 60
 gcgctcggtt ggccgatggc gcggtatttc atcgccgagc ttgaacgcag cagcgagttg
 120
 tatgagcagg cggcggtttac ccgcatctg gaaagctcgc tgatcaaggg cctgatccct
 180
 gccagccga acaactactc cgaagaactg cgcgacgtac tcggcgtgaa gctgccgcat
 240
 tacttgattc gcgcgcggca gtacatccac gacaacgccc gcgaagccgt gcactctggaa
 300
 gacctggaaa ccgctgcccgg ggtatcgagg ttcaagtgt tcgatgcgtt tcgcaaatac
 360
 tt
 362

<210> 746

<211> 108

<212> PRT

<213> Homo sapiens

<400> 746

Met Asp Ala Val Asp Gly Ala Ser Ala Ser Trp Trp Arg Met Ala Arg
 1 5 10 15
 Tyr Phe Ile Ala Glu Leu Glu Arg Ser Ser Glu Leu Tyr Glu Gln Ala
 20 25 30
 Ala Phe Thr Arg Asp Leu Glu Ser Ser Leu Ile Lys Gly Leu Ile Leu
 35 40 45
 Ala Gln Pro Asn Asn Tyr Ser Glu Glu Leu Arg Asp Val Leu Gly Val
 50 55 60
 Lys Leu Pro His Tyr Leu Ile Arg Ala Arg Gln Tyr Ile His Asp Asn

```

65              70              75              80
Ala Arg Glu Ala Val His Leu Glu Asp Leu Glu Thr Ala Ala Gly Val
                        85              90              95
Ser Arg Phe Lys Leu Phe Asp Ala Phe Arg Lys Tyr
                100              105

```

<210> 747

<211> 416

<212> DNA

<213> Homo sapiens

<400> 747

```

nacgcgttga tcgcccgcga cgttttcac cgcgaatcac cgcacatggc ggcctatttt
60
ctgaatgccg atggcacgcc taaagccacc ggacacgtgc tcaagaaccc agcctgggcc
120
gccgtgttca aacgtatcgc caaggaagga cgggacgcgc tgtaccacgg gccgattggc
180
gacgagatcg cgcgcaaggt tcagggaac cgcaatgcgg gcagcctgtc gcaagcggac
240
ctcaagggtt acaccgcaa ggaacgcacg ccgctgtgca ccgactaca gcaatatcag
300
gtgtgcggca tgccaccgcc gtcgtcaggc gggattgcgg tggcgcagat cctcggcacg
360
ctgcaggccg tggaagcccg cgacccacgc ctggccatcg ccccatgaa accggt
416

```

<210> 748

<211> 138

<212> PRT

<213> Homo sapiens

<400> 748

```

Xaa Ala Leu Ile Ala Ala Asp Arg Phe Ile Pro Gln Ser Pro Asp Met
1           5           10          15
Ala Ala Tyr Phe Leu Asn Ala Asp Gly Thr Pro Lys Ala Thr Gly Thr
20          25          30
Leu Leu Lys Asn Pro Ala Leu Ala Val Phe Lys Arg Ile Ala Lys
35          40          45
Glu Gly Pro Asp Ala Leu Tyr His Gly Pro Ile Ala Asp Glu Ile Ala
50          55          60
Arg Lys Val Gln Gly Asn Arg Asn Ala Gly Ser Leu Ser Gln Ala Asp
65          70          75          80
Leu Lys Ala Tyr Thr Ala Lys Glu Arg Thr Pro Leu Cys Thr Asp Tyr
85          90          95
Lys Gln Tyr Gln Val Cys Gly Met Pro Pro Pro Ser Ser Gly Gly Ile
100         105         110
Ala Val Ala Gln Ile Leu Gly Thr Leu Gln Ala Val Glu Ala Arg Asp
115         120         125
Pro Arg Leu Ala Ile Ala Pro Met Lys Pro
130         135

```

<210> 749

<211> 1211

<212> DNA

<213> Homo sapiens

<400> 749

na g t c c t a g a c g c c a g a c c c g t c c a g a c c c t c c t g c c a g g t g a c a g c c g c c a a g a t g g g g
60
t c t t g g g c c c t g c t g t g g c c t c c c t g c t g t t c a c c g g g c t g c t c g t c c g a c c c c g g g g
120
a c c a t g g c c c a g g c c c a g t a c t g c t c t g t g a a c a a g g a c a t c t t t g a a g t a g a g g a g a a c
180
a c a a a t g t c a c g a g c c g c t g g t g g a c a t c c a c g t c c c g g a g g g c c a g g a g g t g a c c c t c
240
g g a g c c t t g t c c a c c c c t t t g c a t t t c g g a t c c a g g g a a a c c a g c t g t t t c t c a a c g t g
300
a c t c c t g a t t a c g a g g a g a a g t c a c t g c t t g a g g c t c a g c t g c t g t g t c a g a g c g g a g g c
360
a c a t t g g t g a c c c a g t a a g g g t g t t c g t g t c a g t g c t g g a c g t c a a t g a c a a t g c c c c c
420
g a a t t c c c c t t a a g a c c a a g g a g a t a a g g t g g a g g a g g a c a c a g a a a g t g a a c t c c a c c
480
g t c a t c c c c g a g a c g c a a c t g c a g g c t g a g a c c g c g a c a a g g a c g a c a t t c t g t t c t a c
540
a c c c t c c a g g a a a t g a c a g c a g g t g c c a g t g a c t a c t t c t c c c t g g t g a g t g t a a a c c g t
600
c c g c c c t g a g g c t g g a c c g c c c c t g g a c t t c t a c g a g c g g c c a a c a t g a c t t c t g g
660
c t g c t g g t g c g g g a c a c t c c g g g g g a g a a t g t g g a a c c c a g c c a c a t g c c a c c g c c a c a
720
c t a g t g c t g a a c g t g g t g c c c g c g a c c t g c g g c c c c c g t g g t t c c t g c c t g c a c c t t c
780
t c a g a t g g c t a c g t c t g c a t t c a a g c t c a g t a c c a c g g g g c t g t c c c c a c g g g g c a c a t a
840
c t g c c a t c t c c c c t g t c c t g c g t c c c g g a c c a t c t a c g c t g a g g a c g g a g a c c g c g g c
900
a t c a a c c a g c c a t c a t c t a c a g c a t c t t t a g g g g a a a c g t g a a t g g t a c a t t c a t c a t c
960
c a c c c a g a c t c g g g c a a c c t c a c c g t g g c c a g g a g t g t c c c a g c c c c a t g a c c t t c c t t
1020
c t g c t g g t g a a g g g c c a a c a g g c c g a c c t t g c c c g c t a c t c a g t g a c c c a g g t c a c c g t g
1080
g a g g g c t g t g t g t c g g c c g g a g g a c c c c c c g t t c c c c a g a g c t g t a t c g t g g c a c
1140
c g t g g c g c g t g g c g t g g a g c g g g c g t t g t g g t c a a g g a t c a g a c t g c c c c t t t t c a g c c
1200
t c t g a g g a t c c
1211

<210> 750

<211> 385

<212> PRT

<213> Homo sapiens

<400> 750

Met Gly Ser Trp Ala Leu Leu Trp Pro Pro Leu Leu Phe Thr Gly Leu

```

1           5           10           15
Leu Val Arg Pro Gly Thr Met Ala Gln Ala Gln Tyr Cys Ser Val
20
Asn Lys Asp Ile Phe Glu Val Glu Glu Asn Thr Asn Val Thr Glu Pro
35
Leu Val Asp Ile His Val Pro Glu Gly Gln Glu Val Thr Leu Gly Ala
50
Leu Ser Thr Pro Phe Ala Phe Arg Ile Gln Gly Asn Gln Leu Phe Leu
65
Asn Val Thr Pro Asp Tyr Glu Glu Lys Ser Leu Leu Glu Ala Gln Leu
80
Leu Cys Gln Ser Gly Gly Thr Leu Val Thr Gln Leu Arg Val Phe Val
100
Ser Val Leu Asp Val Asn Asp Asn Ala Pro Glu Phe Pro Phe Lys Thr
115
Lys Glu Ile Arg Val Glu Glu Asp Thr Lys Val Asn Ser Thr Val Ile
130
Pro Glu Thr Gln Leu Gln Ala Glu Asp Arg Asp Lys Asp Asp Ile Leu
145
Phe Tyr Thr Leu Gln Glu Met Thr Ala Gly Ala Ser Asp Tyr Phe Ser
160
Leu Val Ser Val Asn Arg Pro Ala Leu Arg Leu Asp Arg Pro Leu Asp
180
Phe Tyr Glu Arg Pro Asn Met Thr Phe Trp Leu Leu Val Arg Asp Thr
195
Pro Gly Glu Asn Val Glu Pro Ser His Thr Ala Thr Ala Thr Leu Val
210
Leu Asn Val Val Pro Ala Asp Leu Arg Pro Pro Trp Phe Leu Pro Cys
225
Thr Phe Ser Asp Gly Tyr Val Cys Ile Gln Ala Gln Tyr His Gly Ala
240
Val Pro Thr Gly His Ile Leu Pro Ser Pro Leu Val Leu Arg Pro Gly
260
Pro Ile Tyr Ala Glu Asp Gly Asp Arg Gly Ile Asn Gln Pro Ile Ile
275
Tyr Ser Ile Phe Arg Gly Asn Val Asn Gly Thr Phe Ile Ile His Pro
290
Asp Ser Gly Asn Leu Thr Val Ala Arg Ser Val Pro Ser Pro Met Thr
305
Phe Leu Leu Leu Val Lys Gly Gln Gln Ala Asp Leu Ala Arg Tyr Ser
320
Val Thr Gln Val Thr Val Glu Gly Cys Gly Cys Gly Arg Glu Pro Ala
340
Pro Leu Pro Pro Glu Pro Val Ser Trp His Arg Gly Ala Trp Arg Trp
355
Ser Gly Arg Cys Gly Gln Gly Cys Ser Cys Pro Phe Ser Ala Ser Glu
370
Asp
385

```

<210> 751

<211> 345

<212> DNA

<213> Homo sapiens

<400> 751
 cgcgctgcgcg tcacgtgcaa cgacatgagc gaggtcaaca tcgacgcggc gctgggtggcg
 60
 gcaggcgcgcg ggctgtgcgcg caccgaggag aagctcgtcg agatgtcgaa cggctgcacg
 120
 tgctgcacgc tgccgcacga cctgatgcag gaagtggcga gactggcggg cgaagggccg
 180
 ttcgatgcgc tggatcatga gagcacgcgc gtgtccgagc cgatgcgggt cgccgccacg
 240
 ttcgatttcc gtgaccagga cggcgtctcg ctgccgcgac tcgcgcgggt ggataccatg
 300
 gtcaccgctg tcgacgccgc gtccttctcg cgcgactacg gctcg
 345

<210> 752
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 752
 Arg Val Ala Val Ile Val Asn Asp Met Ser Glu Val Asn Ile Asp Ala
 1 5 10 15
 Ala Leu Val Ala Ala Gly Gly Gly Leu Ser Arg Thr Glu Glu Lys Leu
 20 25 30
 Val Glu Met Ser Asn Gly Cys Ile Cys Cys Thr Leu Arg Asp Asp Leu
 35 40 45
 Met Gln Glu Val Ala Arg Leu Ala Gly Glu Gly Arg Phe Asp Ala Leu
 50 55 60
 Val Ile Glu Ser Thr Gly Val Ser Glu Pro Met Pro Val Ala Ala Thr
 65 70 75 80
 Phe Asp Phe Arg Asp Gln Asp Gly Val Ser Leu Ala Asp Val Ala Arg
 85 90 95
 Leu Asp Thr Met Val Thr Val Val Asp Ala Ala Ser Phe Leu Arg Asp
 100 105 110
 Tyr Gly Ser
 115

<210> 753
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 753
 gcgcgccagt acgccaagac cgtccgcaag gaccgcaagg gcgaacggcg gcgtcggggc
 60
 gcgtcggact agtcacgat gcatccgaac cgcgccttcc gctttgccga tgatgtctcg
 120
 atgctcgatt tcgcggccaa gcgagccttt gcgcacatct tcgtgagcac gcccgagggg
 180
 cctatggtag cgcgatcccc ggttacgccc ttcgaaggag cttccgctt ccatgtcgcg
 240
 cgcggcaatc ggatcgcgcg gcacctggat ggcgcgacgc tgctgctcag catcagcgcg
 300

accgacggct atatcagccc gagctggtag gccgaccgc agggaccaca gt
352

<210> 754

<211> 91

<212> PRT

<213> Homo sapiens

<400> 754

```
Met His Pro Asn Arg Ala Phe Arg Phe Ala Asp Asp Val Ser Met Leu
 1           5           10          15
Asp Phe Ala Ala Lys Arg Ala Phe Ala His Ile Phe Val Ser Thr Pro
          20           25           30
Glu Gly Pro Met Val Ala His Ala Pro Val Thr Pro Phe Asp Gly Ala
          35           40           45
Phe Arg Phe His Val Ala Arg Gly Asn Arg Ile Ala Arg His Leu Asp
          50           55           60
Gly Ala Thr Leu Leu Leu Ser Ile Ser Ala Thr Asp Gly Tyr Ile Ser
65           70           75           80
Pro Ser Trp Tyr Ala Asp Pro Gln Gly Pro Gln
          85           90
```

<210> 755

<211> 301

<212> DNA

<213> Homo sapiens

<400> 755

```
tgggatgcag ggtctttctt ctccaaggat ttcattctcg gagggagaaa agggcccccag
60
ctgtctgcc tcaaaccggg ttgccgggct ggagctcctc ccaggcccgt gtgaggaaga
120
gcaaaggcgc gcaggggctc gatgggacca gtcgctcgct caggcccagg aaaaccacac
180
agctgggggc tgtcaggatt ggaccagggt caggccggcc aggcgatggc gggaaaagca
240
ggcccactct gcagacctca atgtctcagg tgcactgcag ggcaaccccg cctaccccg
300
g
301
```

<210> 756

<211> 99

<212> PRT

<213> Homo sapiens

<400> 756

```
Met Gln Gly Leu Ser Ser Pro Arg Ile Ser Phe Leu Glu Gly Glu Lys
 1           5           10          15
Gly Pro Ser Cys Leu Pro Ser Asn Arg Val Ala Gly Leu Glu Leu Leu
          20           25           30
Pro Gly Pro Cys Glu Glu Glu Arg Pro Ala Gly Ala Arg Trp Asp
          35           40           45
Gln Ser Leu Ala Gln Ala Gln Glu Asn His Thr Ala Gly Gly Cys Gln
```

```

      50              55              60
Asp Trp Thr Arg Val Arg Pro Ala Arg Arg Trp Arg Glu Lys Gln Ala
65              70              75              80
His Ser Ala Asp Leu Asn Val Ser Gly Ala Leu Gln Gly Asn Pro Ala
      85              90              95
Tyr Pro Gly

```

```

<210> 757
<211> 311
<212> DNA
<213> Homo sapiens

```

```

<400> 757
actgaggcga tcgccagagg ggtgggcgtg cgagggctgc tcaacatcca gttcgccctg
60
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120
gtctcaaagg catccggcgt gcagctcgcc aaagcggcgg ccctcatcat gacaggggag
180
acgatacgct cgctcaggcg ctccggccac ctgcccaggg ccgacgcccg cgtaaccgat
240
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300
gaggggacgcg t
311

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<210> 758
<211> 103
<212> PRT
<213> Homo sapiens

```

```

<400> 758
Thr Glu Ala Ile Ala Arg Gly Val Gly Val Arg Gly Leu Leu Asn Ile
1      5      10      15
Gln Phe Ala Leu Val Ser Asp Val Leu Tyr Val Ile Glu Ala Asn Pro
20      25      30
Arg Ala Ser Arg Thr Val Pro Phe Val Ser Lys Ala Ser Gly Val Gln
35      40      45
Leu Ala Lys Ala Ala Ala Leu Ile Met Thr Gly Glu Thr Ile Ala Ser
50      55      60
Leu Arg Arg Ser Gly His Leu Pro Glu Ala Asp Ala Ala Val Thr Asp
65      70      75      80
Pro Asp Asp Pro Ile Ala Val Lys Glu Ala Val Leu Pro Phe Lys Arg
85      90      95
Phe Arg Thr Thr Glu Gly Arg
100

```

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<210> 759
<211> 391
<212> DNA
<213> Homo sapiens

```

```

<400> 759

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120
gacgaaaaac tcggcatgct ctacctgccg atgggcaacc agaccccgga ccagttcggg
180
ggctaccgca cgcctgcgtc ggaactgcac gctgccggcc tgacagcgct ggatatcgac
240
actggtaaaq tgcgtgggca ctaccagttc acccaccatg acctgtggga catggacgtg
300
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360
gcctcgacca agcaaggcag catctacgcg t
391

<210> 760
<211> 130
<212> PRT
<213> Homo sapiens

<400> 760
Val His Thr Gly Lys Leu Val Trp Asn Trp Asp Ser Gly Asn Pro Asp
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Asp Thr Thr Pro Ile Ala Glu Gly Lys Thr Tyr Thr Arg Asn Ser Pro
20 25 30
Asn Met Trp Ser Met Phe Ala Val Asp Glu Lys Leu Gly Met Leu Tyr
35 40 45
Leu Pro Met Gly Asn Gln Thr Pro Asp Gln Phe Gly Gly Tyr Arg Thr
50 55 60
Pro Ala Ser Glu Leu His Ala Ala Gly Leu Thr Ala Leu Asp Ile Asp
65 70 75 80
Thr Gly Lys Val Arg Trp His Tyr Gln Phe Thr His His Asp Leu Trp
85 90 95
Asp Met Asp Val Gly Gly Gln Pro Ser Leu Ile Asp Ile Lys Thr Ala
100 105 110
Ala Gly Val Lys Gln Ala Val Met Ala Ser Thr Lys Gln Gly Ser Ile
115 120 125
Tyr Ala
130

<210> 761
<211> 324
<212> DNA
<213> Homo sapiens

<400> 761
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120
tcaggtaact cctgcccgaag agggcccccatt ggttcctcgc ctaaggaagg cagggcgggg
180
cattgggagc cgttgacagc tgggctcagc tggggggagg ggtcagtttg ggagcaggtg
240

cagatttcag ggaggggggg gcctaaaggg aagtagggat cttggtagc tgcaaaattt
 300
 tcctcccat ccccatcca caga
 324

<210> 762
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 762
 Met Gly Asp Gly Glu Asn Phe Ala Ala Tyr Gln Asp Pro Tyr Phe
 1 5 10 15
 Pro Leu Gly Pro Pro Leu Pro Glu Ile Cys Thr Cys Ser Gln Thr Asp
 20 25 30
 Pro Ser Pro Gly Leu Ser Pro Ala Val Asn Gly Ser Gln Cys Pro Ala
 35 40 45
 Leu Pro Ser Leu Gly Glu Glu Pro Trp Gly Pro Leu Gly Gln Glu Val
 50 55 60
 Pro Asp Cys Pro Leu Ser Phe Ala Glu Lys Glu Leu Trp Gly Arg Glu
 65 70 75 80
 Gly Leu Ala Ser Pro Arg Arg Tyr Phe Leu Leu His Gln Gly Ser Lys
 85 90 95
 Lys Val Arg Pro Leu Trp Ala Tyr Leu
 100 105

<210> 763
 <211> 301
 <212> DNA
 <213> Homo sapiens

<400> 763
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 120
 ccgcggtggc cgccaccggc ttaccgagg ccaccggcg cctcggtctg ttctgctgg
 180
 gcgctgcctt gggcaccatt gccggccttg ccatgagcaa cattggcgcg gacacaggcg
 240
 tgaccaagat atgcaatgcc ttaacaacg ccttatttgc gccaccgtg catgccaaga
 300
 t
 301

<210> 764
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 764
 Met Phe Ala Cys Thr Val Gly Ala Asn Lys Ala Leu Leu Lys Ala Leu
 1 5 10 15
 His Ile Leu Val Ser Pro Val Ser Ala Pro Met Leu Leu Met Ala Arg

	20				25					30			
Pro	Ala	Met	Val	Pro	Lys	Ala	Ala	Pro	Ser	Arg	Lys	Gln	Pro
	35					40					45		
Pro	Val	Ala	Ser	Val	Lys	Pro	Val	Ala	Ala	Thr	Ala	Ala	Val
	50				55					60			
Pro	Ala	Val	Ile	Ala	Ile	Leu	Ala	Ala	Thr	Ser	Ser	Thr	Pro
	65			70					75			80	
Met	Ser	Ala	Ile	Ile	Glu	Val	Trp	Asp	Ser	Ala	Ser	Pro	Ile
			85					90				95	
Ala	His	Asn	Ala										
			100										

<210> 765

<211> 831

<212> DNA

<213> Homo sapiens

<400> 765

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120
agcctccaga atcacatca ccagctgaaa ggggagggtcc tgagatataa gcggaaattg
180
agagaagccc agtctgacct gaacaagaca cgctgcgta gtggtagtgc cctcctgcag
240
tcccagtcta gtactgagga cccgaaggat gagcctgcgg agctaaaacc agattctggg
300
gacttatect ccagtcctc agcttcaaa gcatctcagg aggatgccaa tgaatcaagg
360
tctaaacggg atgaagaaga acgagaacga gaaaggagggt agaaggagag ggaacgagaa
420
agagaacggg agaaggagaa ggagagagaa cgagagaagc agaagctaaa agagtcagaa
480
aaagagagag attctgctaa ggataaagag aaaggcaaac atgatgatgg acggaaaaag
540
gaagcagaaa ttatcaaaca attgaagatt gaactcaaga aggcacagga gagccaaaag
600
gagatgaaac tattgctgga tatgtaccgt tctgccccaa aggaacagag agacaaagtt
660
cagctgatgg cagctgagaa gaagtctaa gacagagtgg aagatctaa gcaaaagactc
720
aaggatctgg aagataaaga gaagaaagag aacaagaaaa tggctgatga ggatgccttg
780
aggaagatcc gggcagtgga ggagcagata gaatacctac agaagaagct a
831

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<210> 766

<211> 243

<212> PRT

<213> Homo sapiens

<400> 766

Met Arg His Leu Ile Ser Ser Leu Gln Asn His Asn His Gln Leu Lys

```

      1           5           10           15
Gly Glu Val Leu Arg Tyr Lys Arg Lys Leu Arg Glu Ala Gln Ser Asp
      20           25           30
Leu Asn Lys Thr Arg Leu Arg Ser Gly Ser Ala Leu Leu Gln Ser Gln
      35           40           45
Ser Ser Thr Glu Asp Pro Lys Asp Glu Pro Ala Glu Leu Lys Pro Asp
      50           55           60
Ser Gly Asp Leu Ser Ser Gln Ser Ser Ala Ser Lys Ala Ser Gln Glu
      65           70           75           80
Asp Ala Asn Glu Ile Lys Ser Lys Arg Asp Glu Glu Glu Arg Glu Arg
      85           90           95
Glu Arg Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Lys Glu
      100          105          110
Lys Glu Arg Glu Arg Glu Lys Gln Lys Leu Lys Glu Ser Glu Lys Glu
      115          120          125
Arg Asp Ser Ala Lys Asp Lys Glu Lys Gly Lys His Asp Asp Gly Arg
      130          135          140
Lys Lys Glu Ala Glu Ile Ile Lys Gln Leu Lys Ile Glu Leu Lys Lys
      145          150          155          160
Ala Gln Glu Ser Gln Lys Glu Met Lys Leu Leu Leu Asp Met Tyr Arg
      165          170          175
Ser Ala Pro Lys Glu Gln Arg Asp Lys Val Gln Leu Met Ala Ala Glu
      180          185          190
Lys Lys Ser Lys Ala Glu Leu Glu Asp Leu Arg Gln Arg Leu Lys Asp
      195          200          205
Leu Glu Asp Lys Glu Lys Lys Glu Asn Lys Lys Met Ala Asp Glu Asp
      210          215          220
Ala Leu Arg Lys Ile Arg Ala Val Glu Glu Gln Ile Glu Tyr Leu Gln
      225          230          235          240
Lys Lys Leu

```

<210> 767

<211> 431

<212> DNA

<213> Homo sapiens

<400> 767

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ccccgcgacc agaagttcct ctgcgcgtcc gacggcgaca tgggcgtccc cagggccccg
120
gaggccggca gctggcgctg gggatccctg ctcttcgctc tcttctcggc tgcgtcccta
180
ggtcgggtgg cagccttcaa ggtcgccacg ccgtattccc tgtatgtctg tcccaggagg
240
cagaacgtca ccctcacctg caggctcttg ggccctgtgg acaaagggca cgatgtgacc
300
ttctacaaga cgtggtaccg cagctcgagg ggcgaggtgc agacctgctc agagcgccgg
360
cccatccgca acctcacgtt ccaggacctt cacctgcacc atggaggcca ccaggctgcc
420
aacaccagcc a
431

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<210> 768
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 768
 Met Gly Val Pro Thr Ala Pro Glu Ala Gly Ser Trp Arg Trp Gly Ser
 1 5 10 15
 Leu Leu Phe Ala Leu Phe Leu Ala Ala Ser Leu Gly Pro Val Ala Ala
 20 25 30
 Phe Lys Val Ala Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
 35 40 45
 Asn Val Thr Leu Thr Cys Arg Leu Leu Gly Pro Val Asp Lys Gly His
 50 55 60
 Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Arg Gly Glu Val
 65 70 75 80
 Gln Thr Cys Ser Glu Arg Arg Pro Ile Arg Asn Leu Thr Phe Gln Asp
 85 90 95
 Leu His Leu His His Gly Gly His Gln Ala Ala Asn Thr Ser
 100 105 110

<210> 769
 <211> 422
 <212> DNA
 <213> Homo sapiens

<400> 769
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 cgacttcgaa ctccatcaag tgatttttgc ggtcgacgaa tctgggtttcc gtagaaaga
 120
 acggtatgtt ttgtatgtcg cggccctgcc actcaaacct caccgtgtca cccacctcaa
 180
 aaaaatcccc ggtcggccca caaataaatc aattgcgccc ctctctccag ttcttccatg
 240
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 300
 acgttgaccg gactgatttc ggaccagttg gcgtcggtat tgggggcagg gtagttaccg
 360
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 420
 an
 422

<210> 770
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 770
 Met Phe Cys Met Ser Arg Pro Cys His Ser Asn Leu Thr Val Ser Pro
 1 5 10 15
 Thr Ser Lys Lys Ser Arg Val Gly Pro Gln Ile Asn Gln Leu Arg Arg

```

                20                25                30
Ser Ser Glu Phe Phe His Val Asn Asp Leu Pro Trp Leu Leu Lys Pro
   35                40                45
Arg Pro Ser Arg Pro Trp Asp Ser Lys Val Asp Val Asp Pro Thr Asp
   50                55                60
Phe Gly Pro Val Gly Val Gly Ile Gly Gly Arg Val Val Thr Ala His
   65                70                75                80
Val Asp Asp Leu His Arg His Arg Gln Arg Val Phe Val Val Val Met
                85                90                95
Pro Asp Xaa

```

<210> 771
 <211> 369
 <212> DNA
 <213> Homo sapiens

```

<400> 771
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120
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180
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240
atcgagagaga ttgcgtctctt ggcacgtcag gtgaatatcc cgggtgggatt gcgtgacctc
300
aacgtgaagg aagcggactt cccgattctg gcgaccaacg cgctaaaaga cctgtgggtg
360
ttgattaat
369

```

<210> 772
 <211> 123
 <212> PRT
 <213> Homo sapiens

```

<400> 772
Ala Tyr Ala Gln Phe Leu Ala Gly Met Ala Phe Asn Asn Ala Ser Leu
1         5         10         15
Gly Tyr Val His Ala Met Ala His Gln Leu Gly Gly Phe Tyr Asp Leu
20        25        30
Pro His Gly Val Cys Asn Ala Ile Leu Leu Pro His Val Gln Thr Phe
35        40        45
Asn Cys Lys Val Ala Ala Ser Arg Leu Arg Asp Cys Ala Gln Ala Met
50        55        60
Gly Val Asp Val Ser Gln Met Thr Ala Glu Gln Gly Ala Gln Ala Cys
65        70        75        80
Ile Ala Glu Ile Arg Ser Leu Ala Arg Gln Val Asn Ile Pro Val Gly
85        90        95
Leu Arg Asp Leu Asn Val Lys Glu Ala Asp Phe Pro Ile Leu Ala Thr
100       105       110
Asn Ala Leu Lys Asp Pro Val Gly Leu Ile Asn

```

115

120

<210> 773
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 773
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 60
 gggttacttga tccgcgtgga gccgggcgta caaactccgg aattcaccct ggaaaacgcc
 120
 tccggttcct gccgggattc ggcggtggtg ctggtgcaac tgctgcgcaa cctgggcctg
 180
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 ggcccgtccg gcaccgaggt ggatttcacc gacctgcatg cctggtgcga agtgattttg
 300
 cccggcgcc
 309

<210> 774
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 774
 Pro Pro Leu Pro Ala Val Asp Phe Leu Val Gly Leu Asn Gln Arg Leu
 1 5 10 15
 Ala Ala Asp Ile Gly Tyr Leu Ile Arg Val Glu Pro Gly Val Gln Thr
 20 25 30
 Pro Glu Phe Thr Leu Glu Asn Ala Ser Gly Ser Cys Arg Asp Ser Ala
 35 40 45
 Trp Leu Leu Val Gln Leu Leu Arg Asn Leu Gly Leu Ala Ala Arg Phe
 50 55 60
 Val Ser Gly Tyr Leu Ile Gln Leu Thr Ala Asp Val Lys Ala Leu Asp
 65 70 75 80
 Gly Pro Ser Gly Thr Glu Val Asp Phe Thr Asp Leu His Ala Trp Cys
 85 90 95
 Glu Val Tyr Leu Pro Gly Ala
 100

<210> 775
 <211> 4125
 <212> DNA
 <213> Homo sapiens

<400> 775
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 120
 gctaccagcg aagactccga cctgagcatg cgcacactga gcacgcccag cccagccctg
 180

atatgtccac cgaatctccc aggatctcag aatggaagg gctcgtccac ctctcgtcc
240
tccatcaccc gggagacggg ggccatgggt cactccccgc ccccgaccgc cctcacacac
300
ccgctcatcc ggctcgctc cagaccccg aaggatcagg ccagcataga ccggctcccg
360
gaccactcca tgggtcgatg cttctccttc ctgcccacca accagctgtg ccgctgcgcg
420
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480
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1800

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1980
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3360
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3420


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caaacatcat ggcttcccat ccaatcaaca tcatacaatt acatgtgtaa tcaaggctct
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4020
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<210> 776

<211> 483

<212> PRT

<213> Homo sapiens

<400> 776

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Tyr Gly Ser Glu Gly Lys Gly Ser Ser Ser Ile Ser Ser Asp Val Ser
1 5 10 15
Ser Ser Thr Asp His Thr Pro Thr Lys Ala Gln Lys Asn Val Ala Thr
20 25 30
Ser Glu Asp Ser Asp Leu Ser Met Arg Thr Leu Ser Thr Pro Ser Pro
35 40 45
Ala Leu Ile Cys Pro Pro Asn Leu Pro Gly Phe Gln Asn Gly Arg Gly
50 55 60
Ser Ser Thr Ser Ser Ser Ser Ile Thr Gly Glu Thr Val Ala Met Val
65 70 75 80
His Ser Pro Pro Pro Thr Arg Leu Thr His Pro Leu Ile Arg Leu Ala
85 90 95
Ser Arg Pro Gln Lys Asp Gln Ala Ser Ile Asp Arg Leu Pro Asp His
100 105 110
Ser Met Val Gln Ile Phe Ser Phe Leu Pro Thr Asn Gln Leu Cys Arg
115 120 125
Cys Ala Arg Val Cys Arg Arg Trp Tyr Asn Leu Ala Trp Asp Pro Arg
130 135 140
Leu Trp Arg Thr Ile Arg Leu Thr Gly Glu Thr Ile Asn Val Asp Arg
145 150 155 160
Ala Leu Lys Val Leu Thr Arg Arg Leu Cys Gln Asp Thr Pro Asn Val
165 170 175
Cys Leu Met Leu Glu Thr Val Thr Val Ser Gly Cys Arg Arg Leu Thr

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```

      180              185              190
Asp Arg Gly Leu Tyr Thr Ile Ala Gln Cys Cys Pro Glu Leu Arg Arg
      195              200              205
Leu Glu Val Ser Gly Cys Tyr Asn Ile Ser Asn Glu Ala Val Phe Asp
      210              215              220
Val Val Ser Leu Cys Pro Asn Leu Glu His Leu Asp Val Ser Gly Cys
      225              230              235              240
Ser Lys Val Thr Cys Ile Ser Leu Thr Arg Glu Ala Ser Ile Lys Leu
      245              250              255
Ser Pro Leu His Gly Lys Gln Ile Ser Ile Arg Tyr Leu Asp Met Thr
      260              265              270
Asp Cys Phe Val Leu Glu Asp Glu Gly Leu His Thr Ile Ala Ala His
      275              280              285
Cys Thr Gln Leu Thr His Leu Tyr Leu Arg Arg Cys Val Arg Leu Thr
      290              295              300
Asp Glu Gly Leu Arg Tyr Leu Val Ile Tyr Cys Ala Ser Ile Lys Glu
      305              310              315              320
Leu Ser Val Ser Asp Cys Arg Phe Val Ser Asp Phe Gly Leu Arg Glu
      325              330              335
Ile Ala Lys Leu Glu Ser Arg Leu Arg Tyr Leu Ser Ile Ala His Cys
      340              345              350
Gly Arg Val Thr Asp Val Gly Ile Arg Tyr Val Ala Lys Tyr Cys Ser
      355              360              365
Lys Leu Arg Tyr Leu Asn Ala Arg Gly Cys Glu Gly Ile Thr Asp His
      370              375              380
Gly Val Glu Tyr Leu Ala Lys Asn Cys Thr Lys Leu Lys Ser Leu Asp
      385              390              395              400
Ile Gly Lys Cys Pro Leu Val Ser Asp Thr Gly Leu Glu Cys Leu Ala
      405              410              415
Leu Asn Cys Phe Asn Leu Lys Arg Leu Ser Leu Lys Ser Cys Glu Ser
      420              425              430
Ile Thr Gly Gln Gly Leu Gln Ile Val Ala Ala Asn Cys Phe Asp Leu
      435              440              445
Gln Thr Leu Asn Val Gln Asp Cys Glu Val Ser Val Glu Ala Leu Arg
      450              455              460
Phe Val Lys Arg His Cys Lys Arg Cys Val Ile Glu His Thr Asn Pro
      465              470              475              480
Ala Phe Phe

```

<210> 777

<211> 705

<212> DNA

<213> Homo sapiens

<400> 777

```

gggtaccatcg tttttaaac taattaagat attactcatt ctgtgtggg cccaattcca
60
caccaatctg ctctttaatg ccagactgat ggctctaaac atccttatta actccttttt
120
gtgggttcaa ggaataacaa aaacctcttc tctcattcac cacctctagg ccaggagaaa
180
ttatttttgg ttcaggcttt cacagtgggg gtctgaaagt gaccagtcta gaaaaggatg
240

```

actcagcaaa aggagagctc tgaagggtccc tgaggcggca cggtcagca ttattaggtc
 300
 acatgggtatg acctgaaaca aatacgttct tcccaaatgt ggcaggaccg ggagagcttc
 360
 tcaccaggag ggaaccgccg caatgaccgc cggacgtcca gcaacacttg ttggtagtcc
 420
 ttgctcatct gccgtagggt cttccctgat ataggagggt ggtcattggc attgacattg
 480
 aggagcttgg gccacacttt tcgtctgac tcacagtcga ggagccctcc ttcactgata
 540
 gccatgcgtc taagggcagc cacatcagtg ggtacactgt tcagagcctg gtgtatctct
 600
 aacactttct ttttctttt ggcgttaaag tctgccttct ccgcgcgcgc gtcccagtg
 660
 ccggagggtg gccgtcccct gcgcactccg gaggccatcc ccggg
 705

<210> 778

<211> 134

<212> PRT

<213> Homo sapiens

<400> 778

Met	Ala	Ser	Gly	Val	Arg	Arg	Gly	Arg	Pro	Thr	Ser	Gly	His	Trp	Asp
1				5					10				15		
Gly	Gly	Ala	Glu	Lys	Ala	Asp	Phe	Asn	Ala	Lys	Arg	Lys	Lys	Lys	Val
		20						25					30		
Leu	Glu	Ile	His	Gln	Ala	Leu	Asn	Ser	Asp	Pro	Thr	Asp	Val	Ala	Ala
	35						40				45				
Leu	Arg	Arg	Met	Ala	Ile	Ser	Glu	Gly	Gly	Leu	Leu	Thr	Asp	Glu	Ile
	50					55					60				
Arg	Arg	Lys	Val	Trp	Pro	Lys	Leu	Leu	Asn	Val	Asn	Ala	Asn	Asp	Pro
65					70				75					80	
Pro	Pro	Ile	Ser	Gly	Lys	Asn	Leu	Arg	Gln	Met	Ser	Lys	Asp	Tyr	Gln
			85						90					95	
Gln	Val	Leu	Leu	Asp	Val	Arg	Arg	Ser	Leu	Arg	Arg	Phe	Pro	Pro	Gly
		100						105					110		
Glu	Lys	Leu	Ser	Arg	Ser	Cys	His	Ile	Trp	Glu	Glu	Arg	Ile	Cys	Phe
		115					120					125			
Arg	Ser	Tyr	His	Val	Thr										
															130

<210> 779

<211> 322

<212> DNA

<213> Homo sapiens

<400> 779

tccggacatg tgcaacaat tcaatgatgt ggtgcgtcga catgggtgtgc atcactctgt
 60
 gactgtgagt gattctgagg ataccgttgc gccgtcccag ctggttcgat cccctcgtaa
 120
 cgccttgccct ttgaaggaa cccagtgaggaa ggctagacca agtaaatatg aatcaccaaa
 180

cgccagcaac ttcacgtgca ggcattgtggc aactggcaaa gagggcactg atgatgagta
 240
 tgctaactca aactactact actcgtatgc tgccaatcga ctaggagacg aggaaacgga
 300
 ggaaatgata ggtttggcta cc
 322

<210> 780
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 780
 Met Cys Lys Gln Phe Asn Asp Val Val Arg Arg His Gly Val His His
 1 5 10 15
 Ser Val Thr Val Ser Asp Ser Glu Asp Thr Val Ala Pro Ser Gln Leu
 20 25 30
 Val Arg Ser Pro Arg Asn Ala Leu Pro Leu Lys Glu Pro Ser Gly Lys
 35 40 45
 Ala Arg Pro Ser Lys Tyr Glu Ser Pro Asn Ala Ser Asn Phe Ile Val
 50 55 60
 Arg His Val Ala Thr Gly Lys Glu Gly Thr Asp Asp Glu Tyr Ala Asn
 65 70 75 80
 Ser Asn Tyr Tyr Tyr Ser Met Ser Ala Asn Arg Leu Gly Asp Glu Glu
 85 90 95
 Thr Glu Glu Met Ile Gly Leu Ala Thr
 100 105

<210> 781
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 781
 nntcgcgtgc ctggaatgtg tgtctgtgta tgtgtgtgta tgtatgtgtg tatggaatgt
 60
 gtgtgtatgn gaatatgtgt gtgtatngaa atgtgtgtgt gtgtttggaa tgtgtgtatg
 120
 gaatgtgtgt ctgtgtatgg aatatgtgtg agtatngaa tgtgtgtgtg tgtttggaat
 180
 gtatcgaatg tgtgtctgtg tgtaaggaat gtgtgtgtat ggaatgtgtt tacgtgcatg
 240
 tgtctggaat gtgtgtgtat ggaatgtgtg tgtatgtgta tngaatgtg tgtgtgt
 297

<210> 782
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 782
 Xaa Arg Val Pro Gly Met Cys Val Cys Val Cys Met Tyr Val
 1 5 10 15
 Cys Met Glu Cys Val Cys Met Xaa Ile Cys Val Cys Met Xaa Met Cys

```

                20                25                30
Val Cys Val Trp Asn Val Cys Met Glu Cys Val Ser Val Tyr Gly Ile
      35                40                45
Cys Val Ser Met Xaa Met Cys Val Cys Val Trp Asn Val Ser Asn Val
      50                55                60
Cys Leu Cys Val Arg Asn Val Cys Val Trp Asn Val Phe Thr Cys Met
      65                70                75                80
Cys Leu Glu Cys Val Cys Met Glu Cys Val Cys Met Cys Met Xaa Met
      85                90                95
Cys Val Cys

```

<210> 783

<211> 612

<212> DNA

<213> Homo sapiens

<400> 783

```

accggtgacg taactgctcc cgctggcagc ttcgagggcg atgtcgattt gcgtgcccg
60
caccgggtcg agtgagctgc ccagcagcaa gccaccaca tcggtgacca gaccgatcac
120
tttgttgagc acgtcgatga cgggcaactt caaggaaatc caggtgcgga cttgcgcggt
180
cgcacaaaa atcggctggg tgctgatcaa ctgcgggttg ccaatcgag aatttgcg
240
gttcgatgac acgtgtcttc accgtgatat tcagcagccc cagtaactcc accggcaact
300
cgacggccac cgcgctggct ttgttgga gctgcacaaa gccctgaatc aggttgaaca
360
gttgagggtt gacgtccagg gcgctcttgt ccgtgcggtt ttgtatatgt atcaggtcgc
420
ccagggtcag gatctgcgtg cctggggcaa tcagcttgat tgcttcgagg ttattgatca
480
ccacctggac cgcattaccg ccagcttga gcacatcgat ggcgccctgg atcaactggc
540
cgacggtcgc gtcggtcttg agcaactggc cgtagttgcc ggcgctgacg ttgaggcgga
600
tggccgacgc gt
612

```

<210> 784

<211> 190

<212> PRT

<213> Homo sapiens

<400> 784

```

Met Ser Ile Cys Val Pro Gly Thr Gly Ser Ser Glu Leu Pro Ser Ser
  1                5                10                15
Lys Pro Thr Thr Ser Val Thr Arg Pro Ile Thr Leu Leu Ser Thr Ser
      20                25                30
Met Thr Gly Asn Phe Lys Glu Ile Gln Val Arg Thr Cys Ala Val Arg
      35                40                45
Thr Lys Ile Gly Trp Val Ser Ile Asn Cys Gly Leu Pro Ile Ala Glu

```

```

      50              55              60
Phe Ala Arg Phe Asp Thr Cys Leu His Arg Asp Ile Gln Gln Pro
65              70              75              80
Gln Tyr Val His Arg Gln Leu Asp Gly His Arg Ala Gly Phe Val Gly
      85              90              95
Gln Leu His Lys Ala Leu Asn Gln Val Glu Gln Leu Gln Val Asp Val
      100             105             110
Gln Gly Ala Leu Val Arg Ala Val Leu Tyr Ile Asp Gln Val Ala Gln
      115             120             125
Val Gln Asp Leu Arg Ala Trp Gly Asn Gln Leu Asp Cys Phe Glu Val
      130             135             140
Ile Asp His His Leu Asp Arg Ile Thr Ala Gln Leu Glu His Ile Asp
145             150             155             160
Gly Gly Leu Asp Gln Leu Ala Asp Gly Arg Val Gly Leu Glu Gln Leu
      165             170             175
Val Val Val Ala Gly Ala Asp Val Glu Ala Asp Gly Arg Arg
      180             185             190

```

<210> 785

<211> 408

<212> DNA

<213> Homo sapiens

<400> 785

```

accttggaact acttcactat cgaccctcgg ctaggcgacg acgatgactt cgatcacctg
60
cttcaggcgcg ccacagctcg tgggtctgtca gtactgctcg acgggggtgt caaccacgtc
120
tcgcgtcgca accgcatcgt gcaggatgcg cagagtgtcg ggccagattc agacgccggc
180
cgtatgggttc gctgggtgtga ggggcgcctc gacgttttcg aggggtcatag tgacctggtc
240
gcactcaacc acgacaaccc cgcatgtcgg gaacatgtca cccggatcat gaactattgg
300
tgcggtgcgcg gtgttgacgg ctggcggctg gacgccgcta ttccgtcaat cctgagttct
360
gggctgcggg gctgcctccg gtgcgagaga agcgccctga cgtgagga
408

```

<210> 786

<211> 134

<212> PRT

<213> Homo sapiens

<400> 786

```

Thr Leu Asp Tyr Phe Thr Ile Asp Pro Arg Leu Gly Asp Asp Asp
1      5      10      15
Phe Asp His Leu Leu Gln Ala Ala His Ala Arg Gly Leu Ser Val Leu
      20      25      30
Leu Asp Gly Val Val Asn His Val Ser Arg Arg Asn Arg Ile Val Gln
      35      40      45
Asp Ala Gln Ser Ala Gly Pro Asp Ser Asp Ala Gly Arg Met Val Arg
      50      55      60
Trp Cys Glu Gly Arg Leu Asp Val Phe Glu Gly His Ser Asp Leu Val

```

```

65              70              75              80
Ala Leu Asn His Asp Asn Pro Ala Val Arg Glu His Val Thr Arg Ile
      85              90              95
Met Asn Tyr Trp Cys Gly Arg Gly Val Asp Gly Trp Arg Leu Asp Ala
      100             105             110
Ala Ile Pro Ser Ile Leu Ser Ser Gly Leu Arg Cys Cys Leu Arg Cys
      115             120             125
Glu Arg Ser Ala Leu Thr
      130

```

<210> 787

<211> 310

<212> DNA

<213> Homo sapiens

<400> 787

```

acgcgtgaag gggaatgaaa gggtttttcc tggatcaaaa tgatgcttgt ggcagacaca
60
gttggaaacca cagacgatgc cacgcttgtg tcagcagtgc gacactggcc cactggcgtg
120
ccttggtctc tcctcattgc tgccgtcact gtgtgctggg catgccctgc agttacccca
180
aagcttttatg tcacaacatt gaggctggcg gaaaaagacc ggccccttca cccacacctta
240
gacttctcgg aaggggccgcc cgggtccaca acctggcccg ttaactccct gggcagctgc
300
tggggggagaa
310

```

<210> 788

<211> 90

<212> PRT

<213> Homo sapiens

<400> 788

```

Met Met Leu Val Ala Asp Thr Val Gly Thr Thr Asp Asp Ala Thr Leu
1          5          10          15
Val Ser Ala Val Arg His Trp Pro Thr Trp Arg Pro Trp Ser Leu Leu
      20          25          30
Ile Ala Ala Val Thr Val Cys Trp Ala Cys Pro Ala Val Thr Pro Lys
      35          40          45
Leu Tyr Val Thr Thr Leu Arg Leu Ala Glu Lys Asp Arg Pro Leu His
      50          55          60
Pro Thr Leu Asp Phe Leu Glu Gly Pro Pro Gly Ser Thr Thr Trp Pro
65          70          75          80
Val Asn Ser Leu Gly Ser Cys Trp Gly Arg
      85          90

```

<210> 789

<211> 369

<212> DNA

<213> Homo sapiens

<400> 789

acgcgtgaag ttgcagcagc aagcaatctg cctcgcttct ggtgccacc gaaaccaagg
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tctgccagac agcagcgctg ggacctctcc cctccccagc aggatgggccc ggctctggaa
120
gcacgaggtg ttccaaagtg caaacaagct gctgttaaat aattattccc aaacgccaaa
180
gcccttgctg gtttgcttgc ttgctttttt ctttttttgc ctgcacaga tatcgctagg
240
gcagagtatt gacatttcgt tttctttttg ttatgggtga taaagcagcg tgtttcttgt
300
gagtgatgc ctgtatttcc ctgcagagct gattgccagt ccattttctt ctatcccatc
360
cccattttc
369

<210> 790

<211> 114

<212> PRT

<213> Homo sapiens

<400> 790

Met Asp Trp Gln Ser Ala Leu Gln Gly Asn Thr Gly Ile His Ser Gln
1 5 10 15
Glu Thr Pro Cys Phe Ile Thr His Asn Lys Lys Thr Lys Cys Gln
20 25 30
Tyr Ser Ala Leu Ala Ile Ser Val Arg Gly Lys Lys Arg Lys Lys Gln
35 40 45
Ala Ser Lys Pro Ala Arg Ala Leu Ala Phe Gly Asn Asn Tyr Leu Thr
50 55 60
Ala Ala Cys Leu His Phe Gly Thr Pro Arg Ala Ser Arg Ala Gly Pro
65 70 75 80
Ser Cys Trp Gly Gly Glu Arg Ser Gln Arg Cys Cys Leu Ala Asp Leu
85 90 95
Gly Phe Gly Gly His Gln Lys Arg Gly Arg Leu Leu Ala Ala Thr
100 105 110
Ser Arg

<210> 791

<211> 420

<212> DNA

<213> Homo sapiens

<400> 791

nctctgacca aaaggaaggt atatgaaaac acaacactag gcttcattgt tgaagttgaa
60
ggctttccag ttcttggtgt gaaatgggtat cgaataaaat ctttactaga gccagatgaa
120
agaatcaaaa tggaaaagagt gggtaaatgt tgttcactgg aaatttctaa cattcaaaaa
180
ggagaagggg gagagtacat gtgtcatgct gtaaacatca taggggaagc aaagagcttt
240
gcaaatgtag acataatgcc ccaggaagaa agagtgggtg cactaccacc tccagtaaca
300

catcagcatg tcattggagtt tgatttggaa cacaccacat catcaagaac accttctctt
 360
 caagaaattg tccttgaagt tgaattaagt gaaaagacg ttaaagaatt tgagaagcag
 420

<210> 792
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 792
 Thr Lys Arg Lys Val Tyr Glu Asn Thr Thr Leu Gly Phe Ile Val Glu
 1 5 10 15
 Val Glu Gly Leu Pro Val Pro Gly Val Lys Trp Tyr Arg Asn Lys Ser
 20 25 30
 Leu Leu Glu Pro Asp Glu Arg Ile Lys Met Glu Arg Val Gly Asn Val
 35 40 45
 Cys Ser Leu Glu Ile Ser Asn Ile Gln Lys Gly Glu Gly Glu Tyr
 50 55 60
 Met Cys His Ala Val Asn Ile Ile Gly Glu Ala Lys Ser Phe Ala Asn
 65 70 75 80
 Val Asp Ile Met Pro Gln Glu Glu Arg Val Val Ala Leu Pro Pro Pro
 85 90 95
 Val Thr His Gln His Val Met Glu Phe Asp Leu Glu His Thr Thr Ser
 100 105 110
 Ser Arg Thr Pro Ser Pro Gln Glu Ile Val Leu Glu Val Glu Leu Ser
 115 120 125
 Glu Lys Asp Val Lys Glu Phe Glu Lys Gln
 130 135

<210> 793
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 793
 nacgcgtgcc gggtctcggga aattcattat gggaatgtgc gcgttgtgga gatgctcaga
 60
 ccgcgaacag tactgcggga acccaaacga tcatttttaa cccagacgt ccttgaacca
 120
 aagccaaagt ctacaggtca ctggggcaga ggccgccga aaccagcttc cctcccgcc
 180
 ctaggcgcgc caggtcccg cccagccggg gcgatccttt ggtcggacag tgagggtggg
 240
 agccccaccg acccaagtcc gccgcatcca cccggcgag gcgaccccc acgggcagcc
 300
 gctcaccttc tcctggcccc ggcctcagga aaactgcctg gaggtggccg gggttcccta
 360
 gcggaggctg gcggcgggc ttgcgcctg cctcagctc ccatccgtg gcccggggga
 420
 tggagccgcg tgcgcgcaga ggctcggga ggtccagcc aggtgcctg gaactgtga
 479

<210> 794

<211> 159

<212> PRT

<213> Homo sapiens

<400> 794

```

Xaa Ala Cys Arg Phe Ser Glu Ile His Tyr Gly Asn Val Arg Val Val
 1           5           10           15
Glu Met Leu Arg Pro Arg Thr Val Leu Arg Glu Pro Lys Arg Ser Phe
      20           25           30
Leu Thr Pro Asp Val Pro Glu Pro Lys Ser Thr Gly His Trp
      35           40           45
Gly Arg Gly Arg Pro Lys Pro Ala Ser Pro Pro Gly Leu Gly Ala Pro
      50           55           60
Gly Pro Arg Pro Ala Gly Ala Ile Leu Trp Ser Asp Ser Glu Val Gly
      65           70           75           80
Ser Pro Pro His Pro Ser Pro Pro His Pro Pro Gly Ala Gly Asp Pro
      85           90           95
Arg Arg Ala Ala His Leu Leu Leu Ala Pro Ala Ser Gly Lys Leu
      100          105          110
Pro Gly Gly Gly Arg Gly Ser Leu Ala Glu Ala Gly Arg Arg Ala Ser
      115          120          125
Arg Leu Pro Gln Ser Pro His Pro Trp Pro Gly Gly Trp Ser Pro Leu
      130          135          140
Arg Ala Glu Ala Ala Ala Gly Pro Ser Gln Val Pro Trp Asn Val
      145          150          155

```

<210> 795

<211> 1418

<212> DNA

<213> Homo sapiens

<400> 795

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gccggcgccg gggaggccgg ggccctgcagg cccccggtac gacaagatcc ggactccggc
 60
ccggactacg aggcgctgcc ggctggagcc actgtcacca cgcacatggt ggcaggcgcc
 120
gtggcaggga tcctggagca ctgcgtgatg taccccatcg actgcgtcaa gaccgggatg
 180
cagagtctac agcctgacct agctgcccgc tatcgcaatg tgttgagggc cctctggagg
 240
attataagaa cggaggccct atggaggccc atgagggggc tgaacgtcac agcaacaggc
 300
gcagggcctg cccacgccct ttatcttgcc tgctacgaaa agttaaaaaa gacattgagt
 360
gatgtaatcc accctggggg caatagccat attgccaatg gtgcggccgg gtgtgtggca
 420
acattacttc atgatgcagc catgaacctt gcggaaggct gatctgctga cttggggctc
 480
tgaatctgga tactctccat caccggttgg ctgctgtcac catttcttc ctogttgatg
 540
gcactactag tggtaagca gaggatgcag atgtacaact caccatacca ccgggtgaca
 600
gatgtgtgac gggcagtggt gcaaaatgaa ggggcccggg ccttttaccg cagctacacc
 660

```

acccagctga ccatgaacgt tcctttccaa gccattcact tcatgaccta tgaattcctg
 720
 caggagcact ttaaccccca gagacggtag aacccaagct cccagctcct ctctggagct
 780
 tgcgcaggag ctgtagctgc cgcagccaca acccactgg acgtttgcaa aacactgctc
 840
 aacacccagg agtccttggc ttgtaactca cacattacag gacatatcac aggcattggc
 900
 agtgccttca ggacggtata tcaagtaggt ggggtgacgc cctatttccg aggggtgacg
 960
 gccagagtaa ttaccagat cccctccaca gccatcgcat ggtctgtgta tgagttcttc
 1020
 aaatacctaa tcactaaaag gcaagaagag tggagggctg gcaagtgaag tagcactgaa
 1080
 cgaagccagg ggttcagatg acactgtgc atcctgggtca cattctctgt ctccctggaat
 1140
 gctcccacac caagtggagt tagaaggaag gtagaggggc tctccccacg gattttgggt
 1200
 ttttgactaa caccagtcc tgccaacctc tgttgccacc acctttcctt ccaggcccta
 1260
 agcacgtgca gcaaagcaca ccacagcacc ttgtataacc tctctccate ctgggcctga
 1320
 tgacctgtc tagactgtta tagaggata agcagctcat tcccctgggt cctaataaaa
 1380
 agcctttaa ttaaaaaaaaa aaaaaaaaaa aaaaaaaa
 1418

<210> 796

<211> 176

<212> PRT

<213> Homo sapiens

<400> 796

Met	Ala	Leu	Leu	Val	Val	Lys	Gln	Arg	Met	Gln	Met	Tyr	Asn	Ser	Pro
1				5					10					15	
Tyr	His	Arg	Val	Thr	Asp	Cys	Val	Arg	Ala	Val	Trp	Gln	Asn	Glu	Gly
			20					25					30		
Ala	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr	Gln	Leu	Thr	Met	Asn	Val
			35				40				45				
Pro	Phe	Gln	Ala	Ile	His	Phe	Met	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	His
			50				55				60				
Phe	Asn	Pro	Gln	Arg	Arg	Tyr	Asn	Pro	Ser	Ser	His	Val	Leu	Ser	Gly
65				70						75				80	
Ala	Cys	Ala	Gly	Ala	Val	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val
			85					90						95	
Cys	Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Ser	Leu	Ala	Leu	Asn	Ser	His
			100					105					110		
Ile	Thr	Gly	His	Ile	Thr	Gly	Met	Ala	Ser	Ala	Phe	Arg	Thr	Val	Tyr
			115				120					125			
Gln	Val	Gly	Gly	Val	Thr	Ala	Tyr	Phe	Arg	Gly	Val	Gln	Ala	Arg	Val
			130				135				140				
Ile	Tyr	Gln	Ile	Pro	Ser	Thr	Ala	Ile	Ala	Trp	Ser	Val	Tyr	Glu	Phe
145				150						155				160	
Phe	Lys	Tyr	Leu	Ile	Thr	Lys	Arg	Gln	Glu	Glu	Trp	Arg	Ala	Gly	Lys

165

170

175

<210> 797

<211> 585

<212> DNA

<213> Homo sapiens

<400> 797

aaatttaccg gcggcaaac ccacgtcacc gactacacca acgcctcgcg caccatgctc
 60
 ttcaacatcc acacgctgga gtgggatgcg aagatgctgg agattctoga cgtgccgcgc
 120
 gagatgctgc cggaagttaa gtcgtcttca gaaatctacg gccgcaccaa aagcgggtatc
 180
 gctatcgcgcg gcatcgcggg cgaccaacag cctgctctgt tcggccagat gtgcgtggaa
 240
 gccggggcagg ccaagaacac ttatggcacc ggctgcttcc tgctgatgaa caccggcgac
 300
 aaagccgtca aatccaaaca cggcatgctc accaccatcg cctgcgggtcc acgcggcgaa
 360
 gtggcttatg cgctggaagg cgcggtgttc aacgggtggt ccccgctgca gtggctgcgt
 420
 gatgagctga agatcatcgc ggacgccacc gacaccgaat acttcgccgg caaggtaaa
 480
 gacagcaacg gcgtctacct ggtgccggcc tttaccggcc tggggcgtcc gtactgggac
 540
 ccgtatgccc gtggcgcttt gttggcctg actcgtggcg tacgc
 585

<210> 798

<211> 195

<212> PRT

<213> Homo sapiens

<400> 798

Lys Phe Thr Gly Gly Lys Thr His Val Thr Asp Tyr Thr Asn Ala Ser
 1 5 10 15
 Arg Thr Met Leu Phe Asn Ile His Thr Leu Glu Trp Asp Ala Lys Met
 20 25 30
 Leu Glu Ile Leu Asp Val Pro Arg Glu Met Leu Pro Glu Val Lys Ser
 35 40 45
 Ser Ser Glu Ile Tyr Gly Arg Thr Lys Ser Gly Ile Ala Ile Gly Gly
 50 55 60
 Ile Ala Gly Asp Gln Gln Ala Ala Leu Phe Gly Gln Met Cys Val Glu
 65 70 75 80
 Ala Gly Gln Ala Lys Asn Thr Tyr Gly Thr Gly Cys Phe Leu Leu Met
 85 90 95
 Asn Thr Gly Asp Lys Ala Val Lys Ser Lys His Gly Met Leu Thr Thr
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<212> PRT

<213> Homo sapiens

<400> 800

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Arg Thr Leu Val Phe Arg Val Gln Phe His Thr Cys Thr Ile His Gly					
	370	375	380		
Pro Gln Leu Thr Phe Pro Lys Asp Gln Leu Asp Glu Ala Trp Thr Asp					
385	390	395	400		
Glu Arg Phe Pro Phe Gln Ala Ser Val Glu Phe Val Phe Ser Ser Ser					
	405	410	415		
Pro Glu Lys Ile Lys Gly Ser Thr Pro Arg Asn Asp Pro Ser Val Ser					
	420	425	430		
Val Asp Tyr Asn Thr Thr Glu Pro Ala Val Arg Trp Asp Ser Tyr Glu					
	435	440	445		
Asn Phe Asn Gln His His Glu Asp Ser Val Asp Gly Ser Leu Thr His					
	450	455	460		
Thr Arg Gly Pro Leu Asp Gly Ser Pro Tyr Ala Gln Val Gln Arg Pro					
465	470	475	480		
Pro Arg Gln Thr Pro Pro Ala Pro Ser Pro Glu Pro Pro Pro Pro Pro					
	485	490	495		
Met Leu Ser Val Ser Ser Asp Ser Gly His Ser Ser Thr Leu Thr Thr					
	500	505	510		
Glu Pro Ala Ala Glu Ser Pro Gly Arg Pro Pro Pro Thr Ala Ala Glu					
	515	520	525		
Arg Gln Glu Leu Asp Arg Leu Leu Gly Gly Cys Gly Val Ala Ser Gly					
	530	535	540		
Gly Arg Gly Ala Gly Arg Glu Thr Ala Ile Leu Asp Asp Glu Glu Gln					
	545	550	555		
Pro Thr Val Gly Gly Gly Pro His Leu Gly Val Tyr Pro Gly His Arg					
	565	570	575		
Pro Gly Leu Ser Arg His Cys Ser Cys Arg Gln Gly Tyr Arg Glu Pro					
	580	585	590		
Cys Gly Val Pro Asn Gly Gly Tyr Tyr Arg Pro Glu Gly Thr Leu Glu					
	595	600	605		
Arg Arg Arg Leu Ala Tyr Gly Gly Tyr Glu Gly Ser Pro Gln Gly Tyr					
	610	615	620		
Ala Glu Ala Ser Met Glu Lys Arg Arg Leu Cys Arg Ser Leu Ser Glu					
	625	630	635		
Gly Leu Tyr Pro Tyr Pro Pro Glu Met Gly Lys Pro Ala Thr Gly Asp					
	645	650	655		
Phe Gly Tyr Arg Ala Pro Gly Tyr Arg Glu Val Val Ile Leu Glu Asp					
	660	665	670		
Pro Gly Leu Pro Ala Leu Tyr Pro Cys Pro Ala Cys Glu Glu Lys Leu					
	675	680	685		
Ala Leu Pro Thr Ala Ala Leu Tyr Gly Leu Arg Leu Glu Arg Glu Ala					
	690	695	700		
Gly Glu Gly Trp Ala Ser Glu Ala Gly Lys Pro Leu Leu His Pro Val					
	705	710	715		
Arg Pro Gly His Pro Leu Pro Leu Leu Leu Pro Ala Cys Gly His His					

										725				730				735			
His	Ala	Pro	Met	Pro	Asp	Tyr	Ser	Cys	Leu	Lys	Pro	Pro	Lys	Ala	Gly						
										740	745				750						
Glu	Glu	Gly	His	Glu	Gly	Cys	Ser	Tyr	Thr	Met	Cys	Pro	Glu	Gly	Arg						
										755	760				765						
Tyr	Gly	His	Pro	Gly	Tyr	Pro	Ala	Leu	Val	Thr	Tyr	Ser	Tyr	Gly	Gly						
										770	775				780						
Ala	Val	Pro	Ser	Tyr	Cys	Pro	Ala	Tyr	Gly	Arg	Val	Pro	His	Ser	Cys						
										785	790				795						
Gly	Ser	Pro	Gly	Glu	Gly	Arg	Gly	Tyr	Pro	Ser	Pro	Gly	Ala	His	Ser						
										805	810				815						
Pro	Arg	Ala	Gly	Ser	Ile	Ser	Pro	Gly	Ser	Pro	Pro	Tyr	Pro	Gln	Ser						
										820	825				830						
Arg	Lys	Leu	Ser	Tyr	Glu	Ile	Pro	Thr	Glu	Glu	Gly	Gly	Asp	Arg	Tyr						
										835	840				845						
Pro	Leu	Pro	Gly	His	Leu	Ala	Ser	Ala	Gly	Pro	Leu	Ala	Ser	Ala	Glu						
										850	855				860						
Ser	Leu	Glu	Pro	Val	Ser	Trp	Arg	Glu	Gly	Pro	Ser	Gly	His	Ser	Thr						
										865	870				875						
Leu	Pro	Arg	Ser	Pro	Arg	Asp	Ala	Pro	Cys	Ser	Ala	Ser	Ser	Glu	Leu						
										885	890				895						
Ser	Gly	Pro	Ser	Thr	Pro	Leu	His	Thr	Ser	Ser	Pro	Val	Gln	Gly	Lys						
										900	905				910						
Glu	Ser	Thr	Arg	Arg	Gln	Asp	Thr	Arg	Ser	Pro	Thr	Ser	Ala	Pro	Thr						
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Gln	Arg	Leu	Ser	Pro	Gly	Glu	Ala	Leu	Pro	Pro	Val	Ser	Gln	Ala	Gly						
										930	935				940						
Thr	Gly	Lys	Ala	Pro	Glu	Leu	Pro	Ser	Gly	Ser	Gly	Pro	Glu	Pro	Leu						
										945	950				955						
Ala	Pro	Ser	Pro	Val	Ser	Pro	Thr	Phe	Pro	Pro	Ser	Ser	Pro	Ser	Asp						
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Trp	Pro	Gln	Glu	Arg	Ser	Pro	Gly	Gly	His	Ser	Asp	Gly	Ala	Ser	Pro						
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Arg	Ser	Pro	Val	Pro	Thr	Thr	Leu	Pro	Gly	Leu	Arg	His	Ala	Pro	Trp						
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Gln	Gly	Pro	Arg	Gly	Pro	Pro	Asp	Ser	Pro	Asp	Gly	Ser	Pro	Leu	Thr						
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Pro	Val	Pro	Ser	Gln	Met	Pro	Trp	Leu	Val	Ala	Ser	Pro	Glu	Pro	Pro						
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Gln	Ser	Ser	Pro	Thr	Pro	Ala	Phe	Pro	Leu	Ala	Ala	Ser	Tyr	Asp	Thr						
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Asn	Gly	Leu	Ser	Gln	Pro	Pro	Leu	Pro	Glu	Lys	Arg	His	Leu	Pro	Gly						
										1060	1065				1070						
Pro	Gly	Gln	Gln	Pro	Gly	Pro	Trp	Gly	Pro	Glu	Gln	Ala	Ser	Ser	Pro						
										1075	1080				1085						
Ala	Arg	Gly	Ile	Ser	His	His	Val	Thr	Phe	Ala	Pro	Leu	Leu	Ser	Asp						
										1090	1095				1100						
Asn	Val	Pro	Gln	Thr	Pro	Glu	Pro	Pro	Thr	Gln	Glu	Ser	Gln	Ser	Asn						
										1105	1110				1115						
Val	Lys	Phe	Val	Gln	Asp	Thr	Ser	Lys	Phe	Trp	Tyr	Lys	Pro	His	Leu						
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Ser	Arg	Asp	Gln	Ala	Ile	Ala	Leu	Lys	Lys	Asp	Lys	Asp	Pro	Gly	Ala						
										1140	1145				1150						
Phe	Leu	Ile	Arg	Asp	Ser	His	Ser	Phe	Gln	Gly	Ala	Tyr	Gly	Leu	Ala						

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1155              1160              1165
Leu Lys Val Ala Thr Pro Pro Ser Ala Gln Pro Trp Lys Gly Asp
1170              1175              1180
Pro Val Glu Gln Leu Val Arg His Phe Leu Ile Glu Thr Gly Pro Lys
1185              1190              1195              1200
Gly Val Lys Ile Lys Gly Cys Pro Ser Glu Pro Tyr Phe Gly Ser Leu
1205              1210              1215
Ser Ala Leu Val Ser Gln His Ser Ile Ser Pro Ile Ser Leu Pro Cys
1220              1225              1230
Cys Leu Arg Ile Pro Ser Lys Asp Pro Leu Glu Glu Thr Pro Glu Ala
1235              1240              1245
Pro Val Pro Thr Asn Met Ser Thr Ala Ala Asp Leu Leu Arg Gln Gly
1250              1255              1260
Ala Ala Cys Ser Val Leu Tyr Leu Thr Ser Val Glu Thr Glu Ser Leu
1265              1270              1275              1280
Thr Gly Pro Gln Ala Val Ala Arg Ala Ser Ser Ala Ala Leu Ser Cys
1285              1290              1295
Ser Pro Arg Pro Thr Pro Ala Val Val His Phe Lys Val Ser Ala Gln
1300              1305              1310
Gly Ile Thr Leu Thr Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His
1315              1320              1325
Tyr Pro Val Asn Ser Ile Thr Phe Ser Ser Thr Asp Pro Gln Asp Arg
1330              1335              1340
Arg Trp Thr Asn Pro Asp Gly Thr Thr Ser Lys Ile Phe Gly Phe Val
1345              1350              1355              1360
Ala Lys Lys Pro Gly Ser Pro Trp Glu Asn Val Cys His Leu Phe Ala
1365              1370              1375
Glu Leu Asp Pro Asp Gln Pro Ala Gly Ala Ile Val Thr Phe Ile Thr
1380              1385              1390
Lys Val Leu Leu Gly Gln Arg Lys
1395              1400

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<210> 805

<211> 550

<212> DNA

<213> Homo sapiens

<400> 805

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120
agtcattccat ttacttatca agctgttact gtgtgtgcaa gaagcgccag agagatgata
180
tcaaggagct cttaccatgg ctggcataga gcgctgatg agtaagtcc gtctgcacaa
240
agatcccta agcattcatt cttggctgac attcttggct cagggggctt ccatggcctt
300
gttccccctc tcgggtcacc agttcaggtc gagggggcct atgcttggaa gggccacacc
360
aatggacctt gccaggacac tcagtcacag gtttcacacc caaagagaag acagcccaac
420
ccagaccctc aaaagagagc acctggggga agggagcgtg gaaaccagga ctcagaaga
480

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cacaagagaa aaagaagctg tacactgggg aggcctccgg ggtacctgtg cctgccatgt
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 ctctgaaggc
 550

<210> 806
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 806
 Met Ala Gly Ile Glu Arg Leu Met Ser Lys Phe Arg Leu His Lys Glu
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 20 25 30
 Met Ala Leu Phe Pro Ser Ser Gly His Gln Phe Arg Ser Arg Gly Pro
 35 40 45
 Met Leu Gly Arg Ala Thr Pro Met Asp Leu Ala Arg Thr Leu Ser His
 50 55 60
 Arg Phe His Thr Gln Arg Glu Asp Ser Pro Thr Gln Thr Leu Lys Arg
 65 70 75 80
 Glu His Leu Gly Glu Gly Ser Val Glu Thr Arg Thr Gln Lys Asp Thr
 85 90 95
 Arg Glu Lys Glu Ala Val His Trp Gly Gly Phe Arg Gly Thr Cys Ala
 100 105 110
 Cys His Val Ser Glu Gly
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<210> 807
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 807
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 120
 ccgagtggtt cgaagctcag accgggacag gccgtatatac cagcgcgcgc gattatatct
 180
 gcgccctgat tcgccaggac caggagcgaa gcgacggcct caggcagctt caaacgttga
 240
 tcaccgaggg gttcgacagc ggcattcagc cctcgtcgct tgatgac
 287

<210> 808
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 808
 Met Ala Val Ala Leu Pro His Trp Gln Asp Ala Lys Phe Leu Ala Met
 1 5 10 15
 Ile Ser Arg Gly Gly Arg Ala Arg Gly Met Ala Thr Val Asn Val Ser


```

          20          25          30
Leu Ser Asp Ala Met Thr Glu Trp Val Glu Ala Gln Thr Gly Thr Gly
          35          40          45
Arg Tyr Thr Ser Ala Ser Asp Tyr Ile Cys Ala Leu Ile Arg Gln Asp
          50          55          60
Gln Glu Arg Ser Asp Gly Leu Arg Gln Leu Gln Thr Leu Ile Thr Glu
65          70          75          80
Gly Phe Asp Ser Gly Ile Ser Ala Ser Ser Leu Asp Asp
          85          90

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<210> 809

<211> 405

<212> DNA

<213> Homo sapiens

<400> 809

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120
gacgcgtggt cgcgtcaaat ggagagacga tcggtgccc ccttgcccc cgatcctgat
180
ggccccgaga ttcctgacga tgtcaccacc ctgcccac aggtaatggg tctgccacgt
240
cacctgggta tccactcagc tggaatgggt ctgacgcgag aaccagtagg acgcatctgc
300
cccattgagc cggctcgaat gtttggtcgc acggggctgc agtgggacaa anaaaactgt
360
gcctggatgg ggttggggaa gtttgatctg cttgggttgg ggatg
405

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<210> 810

<211> 135

<212> PRT

<213> Homo sapiens

<400> 810

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Xaa Gly Gly Gly Gly Val Phe Phe Pro Pro Lys Lys Lys Lys
  1          5          10          15
Gly Gly Gly Gly Pro Pro Pro Pro Pro Leu Phe Phe Pro Arg
          20          25          30
Gly Val Tyr Ser Gln Gly Gln Gln Asp Ala Trp Ser Arg Gln Met Glu
          35          40          45
Arg Arg Ser Val Pro Pro Leu Pro His Asp Pro Asp Gly Pro Glu Ile
          50          55          60
Pro Asp Asp Val Thr Thr Leu Ala Gln Gln Val Met Gly Leu Pro Arg
65          70          75          80
His Leu Gly Ile His Ser Ala Gly Met Val Leu Thr Arg Glu Pro Val
          85          90          95
Gly Arg Ile Cys Pro Ile Glu Pro Ala Arg Met Phe Gly Arg Thr Gly
          100          105          110
Leu Gln Trp Asp Lys Xaa Asn Cys Ala Trp Met Gly Leu Gly Lys Phe
          115          120          125
Asp Leu Leu Gly Leu Gly Met

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130

135

<210> 811

<211> 642

<212> DNA

<213> Homo sapiens

<400> 811

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 cagtgccaat gactgccaat ggcaaagaag agctccaacc aaacaccagg tgcttcatgg
 120
 tgggtgacaca ttaacaacac ccgggaagca gtactgccaa cacctagata tgagaaaaag
 180
 aaaacaggca cttaagcga ggctaaccga ctttcaggaa tgataaaggg cagaggaccc
 240
 tgtcacctct acccctgcta cttaaaggcgt ggcccacaga gcagcagcac cagcagcaca
 300
 taaaatgggg ttaaatatga caggaaaaac aagggtgacag ggaaatgggg tgaagatcaa
 360
 gttegtggta ngcttttctt tcctagaggc tttgggcctg agctcttgga gaaagctctc
 420
 caacacctca ggggtgtgctt gttccctctgc cctgtgggga tgctctttgt acgggtggct
 480
 gactggctcc cactttctct cgtattgttg tcttgctctt cctccacaa ccatcaaggc
 540
 tctttccctt aattctataa gacagtacct ctggcttaga aattatatgc cctcctttaa
 600
 aaaaacgaaa tgctagagga catagaacct gaggaataat tt
 642

<210> 812

<211> 106

<212> PRT

<213> Homo sapiens

<400> 812

Met Val Val Arg Glu Glu Thr Arg Gln Gln Tyr Gly Gly Lys Trp Glu
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 Pro Val Ser His Pro Tyr Lys Glu His Pro His Arg Ala Gly Glu Gln
 20 25 30
 Ala His Pro Glu Val Leu Glu Ser Phe Leu Gln Glu Leu Arg Pro Lys
 35 40 45
 Ala Ser Arg Lys Glu Arg Xaa Thr Thr Asn Leu Ile Phe Thr Pro Phe
 50 55 60
 Pro Cys His Leu Val Phe Pro Val Ile Phe Asn Pro Ile Leu Cys Ala
 65 70 75 80
 Ala Gly Ala Ala Ala Leu Trp Ala Thr Pro Leu Val Ala Gly Val Glu
 85 90 95
 Val Thr Gly Ser Ser Ala Leu Tyr His Ser
 100 105

<210> 813

<211> 558

<212> DNA

<213> Homo sapiens

<400> 813

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 cgcccgactc cgatcagccg ttcgaaagg cgagccgaa gatcatgaca ttctgcggc
 120
 gttcgctgac cagcaccggg ccgcccggct gggccgggaa accgtggaac aagggaagcg
 180
 ggggcggcgc ggggggtgac gccttcggcc ccttcgcctt cggtcagcgt gcggcgcaat
 240
 tcgggggtcga ggatgatccg cggcccttcg atcttgacca cgatctccag ttgcccgcca
 300
 ttgtcttcgc cgccgacatc cagcgtgccg ccgcgacca gcgcctcgt ggcgatcagg
 360
 gcgagggtta gcatcaccct cagcgcggac ttgggcagcg tctccgttcc caccacaccg
 420
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 558

<210> 814

<211> 151

<212> PRT

<213> Homo sapiens

<400> 814

Met	Thr	Phe	Ser	Ala	Gly	Ser	Leu	Thr	Ser	Thr	Gly	Pro	Pro	Gly	Trp
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Ala	Gly	Lys	Pro	Trp	Asn	Lys	Gly	Ser	Gly	Gly	Gly	Ala	Arg	Gly	Asp
			20				25					30			
Ala	Phe	Gly	Pro	Leu	Ala	Phe	Gly	Gln	Arg	Ala	Ala	Gln	Phe	Gly	Val
		35				40					45				
Glu	Asp	Asp	Pro	Arg	Pro	Phe	Asp	Leu	Asp	His	Asp	Leu	Gln	Leu	Pro
	50					55				60					
Ala	Ile	Val	Phe	Ala	Ala	Asp	Ile	Gln	Arg	Ala	Ala	His	Gln	Arg	
65				70				75					80		
Leu	Ala	Gly	Asp	Gln	Gly	Glu	Val	Gln	His	His	Leu	Gln	Arg	Gly	Leu
			85					90					95		
Gly	Gln	Arg	Leu	Arg	Phe	His	Pro	Pro	Val	Glu	Leu	Arg	Ala	Leu	Ile
			100				105						110		
Val	Gly	Asn	Gln	Pro	Leu	Val	Arg	Gly	Phe	Arg	Phe	Ala	Arg	Val	Asp
		115				120						125			
Leu	Phe	Ala	Glu	Pro	Ala	Gly	Gly	Ala	Glu	Gly	Glu	Ala	Glu	Glu	Phe
	130				135						140				
Glu	Leu	Val	Gly	Gly	Tyr	Ala									
145					150										

<210> 815

<211> 315

<212> DNA

<213> Homo sapiens

<400> 815

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 120
 agctagcgca ggagaaaagg gagacctcac gtccgaagcg gattcagcaa gtgcacaacc
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 ttctacccac gctgagggtt ccagtgaagt tactgctacg tccagtatag atgagcagg
 240
 agacctcatt gctgcaccgt taagcgaaga gtccaatgtc agcaagctcg ggccgtcccc
 300
 tgaggccgat acatc
 315

<210> 816

<211> 90

<212> PRT

<213> Homo sapiens

<400> 816

Met	Pro	Ser	Asp	Leu	Pro	Lys	Val	Asp	Asp	Glu	Lys	Ala	His	Asp	Ala
1			5					10					15		
Pro	His	Thr	Asp	Gly	Ser	Glu	Pro	Gly	Gln	Ala	Ser	Ala	Gly	Glu	Ser
			20				25					30			
Arg	Asp	Leu	Thr	Ser	Glu	Ala	Asp	Ser	Ala	Ser	Ala	Gln	Pro	Ser	Thr
			35				40				45				
His	Ala	Glu	Val	Ser	Ser	Glu	Val	Thr	Ala	Thr	Ser	Ser	Ile	Asp	Glu
	50				55				60						
Gln	Val	Asp	Leu	Ile	Ala	Ala	Pro	Leu	Ser	Glu	Glu	Ser	Asn	Val	Ser
65			70					75					80		
Lys	Leu	Gly	Pro	Ser	Pro	Glu	Ala	Asp	Thr						
			85					90							

<210> 817

<211> 321

<212> DNA

<213> Homo sapiens

<400> 817

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 120
 aatacacttt tctcaaagct tcaaattaat caatccatta tattctgcaa ctctgttaat
 180
 agtgttgtagc tgctggctaa aaaaataact gaactcggtt attcatgctt ctacattcat
 240
 gctaagatgt tgcaagacca cagaaatcga gtattccatg attgtcgtaa tgggtgcttg
 300
 agaaaccttg tgtgcacaga t
 321

<210> 818
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 818
 Glu Phe Lys Glu Lys Tyr Leu Pro Arg Pro Tyr Val Ile Asn Leu Met
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 Asp Glu Leu Thr Leu Lys Gly Ile Thr Gln Tyr Tyr Ala Phe Val Glu
 20 25 30
 Glu Gly Gln Lys Val His Cys Leu Asn Thr Leu Phe Ser Lys Leu Gln
 35 40 45
 Ile Asn Gln Ser Ile Ile Phe Cys Asn Ser Val Asn Ser Val Glu Leu
 50 55 60
 Leu Ala Lys Lys Ile Thr Glu Leu Gly Tyr Ser Cys Phe Tyr Ile His
 65 70 75 80
 Ala Lys Met Leu Gln Asp His Arg Asn Arg Val Phe His Asp Cys Arg
 85 90 95
 Asn Gly Ala Cys Arg Asn Leu Val Cys Thr Asp
 100 105

<210> 819
 <211> 3422
 <212> DNA
 <213> Homo sapiens

<400> 819
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 120
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 180
 ctgccccctga ctccccgaga caggggccagt ggcacacaag gggccagtga ggacaactct
 240
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 300
 ggcaggccctt gccagcccca gacaaggcca cagaaacagc caggccacac caactacagc
 360
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 420
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 480
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1920
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2100
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2160
ctcagtttag ggttgcggga tccccgagtg tgggcgggac tgggacaccc ttggcctct
2220
gtttgtcccc ttccagtc tccacccac cctggagcc cagcctggga ggcacaaaac
2280
caagaagcgg ccagaacgca cctccggctc cggcggaagc gcgaccgttg tgaccacca
2340
gggaccgccc cgctactct gcacgggagc agggacagcg ctagatttcg tgtacaaaa
2400

ctgtgtacc ctctatatat atgttacata gaatgtatat atgttgggaa catgctcgct
 2460
 tctcccggtgt gtccgcgcgcg tgcgtcgtgc gcccgcaaca gagccccaac cgggcctttg
 2520
 ccgggtaagg ggctaccgcg acgccacttg tccacgcagc caccaccggc ccggggccagt
 2580
 ccttgcagct ccgtccgcct gtccgtccgt gtccctcagct ctgtccacgc ttcgataggc
 2640
 ctgacgcagc ccccgagcca gggccgcctt agcaacttcc tgtacatatg actgtaaaaat
 2700
 ggtaaacgtg tgtattatat ctggcctcgt tatatagtgt atatatatgt atacatatac
 2760
 atatatataa tatatatgaa gactgtaaat gttaagacga ctagtgttct tattagtata
 2820
 ttgcttcaca ctgaagattg tgtgtatcga gctgtttcta aaagatgttt attttcctta
 2880
 agagtaaaaa acagtcattg cattcagaaa aaaaaaaaaa aagtaataa agatacaacg
 2940
 attgttttgg aaaatctgca gcccggtgat tccgaccaga ttcagctggg agccggggcca
 3000
 ggcttttagt tggggaatgg gaatgaaggg aggggctggg ggggggggga tgaatggagt
 3060
 caggggagtcg gcctttcaca gaacaggaaa cctccccgcg cctgtgtccc cctctccagt
 3120
 gtggcggcag gtcgggaggg agggaggcttc tttgctgtga aatgaccagg ggccgggatg
 3180
 ggggaggtga gacgtgccag acttcttgca gggagaccca agctgtagct cctgtcacac
 3240
 aacaggtcct ggaagtcaat ccactctccc gtgccaccca gggaccttct gtcgggaggg
 3300
 ggaggggaag cctttgccta ggtgctgggg gagggcccaa gcactctcac tagtcagcac
 3360
 atccatcagc tgaagacaca aaaccagat tataaataat ttcattttta attctctgta
 3420
 ca
 3422

<210> 820

<211> 494

<212> PRT

<213> Homo sapiens

<400> 820

Met Asn Ser Lys Lys Leu Ser Ser Thr Asp Cys Phe Lys Thr Glu Ala
 1 5 10 15
 Phe Thr Ser Pro Glu Ala Leu Gln Pro Gly Gly Thr Ala Leu Ala Pro
 20 25 30
 Lys Lys Arg Ser Arg Lys Gly Arg Ala Gly Ala His Gly Leu Ser Lys
 35 40 45
 Gly Pro Leu Glu Lys Arg Pro Tyr Leu Gly Pro Ala Leu Pro Leu Thr
 50 55 60
 Pro Arg Asp Arg Ala Ser Gly Thr Gln Gly Ala Ser Glu Asp Asn Ser
 65 70 75 80
 Gly Gly Gly Gly Lys Lys Pro Lys Met Glu Glu Leu Gly Leu Ala Ser

[illegible]

<210> 821

<211> 420

<212> DNA

<213> Homo sapiens

<400> 821

acgcgtcccg tcacctgcgg tatggaccaa gtgagttgtg tgctcgacaa tgggttcggc
 60
 gccatcatgg atgtgccggg ttccaactat cgcgcccatc gttacacga agcctatcgg
 120
 cgtttgccgc aaaatgtggt gctaggttcg gaaacgacct cgacggtag cagccgtggt
 180
 gtctacaagt ttctgttgt gctgaagtc gatgccatct atccccacca tcagtcgtca
 240
 ggctacgaca cagagtattg ttctgtgtcg aacacccccg atgtcgattt cgcctcggc
 300
 gaagactatc cctggacgat ggggcagttt gtctggacgg gcttcgacta cctcggtgaa
 360
 ccttcgcctt acgacaccga tgcctggccc tctcagcct cctcttcgg cattgtcgac
 420

<210> 822

<211> 133

<212> PRT

<213> Homo sapiens

<400> 822

Met	Asp	Gln	Val	Ser	Cys	Val	Leu	Asp	Asn	Gly	Phe	Ala	Ala	Ile	Met
1				5					10					15	
Asp	Val	Pro	Gly	Phe	Asn	Tyr	Arg	Ala	His	Arg	Tyr	Thr	Glu	Ala	Tyr
			20				25						30		
Arg	Arg	Leu	Pro	Gln	Asn	Val	Val	Leu	Gly	Ser	Glu	Thr	Thr	Ser	Thr
		35				40						45			
Val	Ser	Ser	Arg	Gly	Val	Tyr	Lys	Phe	Pro	Val	Val	Leu	Lys	Ser	Asp
	50				55					60					
Ala	Ile	Tyr	Pro	Asp	His	Gln	Ser	Ser	Gly	Tyr	Asp	Thr	Glu	Tyr	Cys
65					70				75					80	
Ser	Trp	Ser	Asn	Thr	Pro	Asp	Val	Asp	Phe	Ala	Leu	Ala	Glu	Asp	Tyr
			85					90					95		
Pro	Trp	Thr	Met	Gly	Gln	Phe	Val	Trp	Thr	Gly	Phe	Asp	Tyr	Leu	Gly
		100					105						110		
Glu	Pro	Ser	Pro	Tyr	Asp	Thr	Asp	Ala	Trp	Pro	Ser	His	Ala	Ser	Leu
		115				120						125			
Phe	Gly	Ile	Val	Asp											
		130													

<210> 823

<211> 550

<212> DNA

<213> Homo sapiens

<400> 823

tctagattct tgggcagccg agccctctt gaattctca gctaccatc atgatcaaca
 60
 cctcccatgt tccgtccatg aatgaccgca ctgacagcac tggagagatt taatgggtca
 120

```

ccaattgagg cagtgaaggc actcatggca ctcagagctg gaatggggct gatctgagtt
180
gtactgttga ctgcagtggg gatgacaacc tgcattcctt tgctggctgc atcgacaact
240
gctttgtaaa tggcatctac ggaagcatca cctggggccac ccacaacgag gccatccttc
300
acctgtgtgac caagagatgg gtcaatcctc ggttgcaact cacaagggtg atcttgaaaa
360
ggtggaagtg tagtggttgg attctcagga agtgctgtga gccaggctg agtgcttatt
420
cttttgttta ggagagctgc atcttcctgc attctcacct gaaagttctg aaacagacaa
480
gccatgggggt tattgttagc tgggcaagga attgtggact gtccttgga cgctgggaga
540
ttctgggtacc
550

```

<210> 824

<211> 161

<212> PRT

<213> Homo sapiens

<400> 824

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Met Ala Cys Leu Phe Gln Asn Phe Gln Val Arg Met Gln Glu Asp Ala
1 5 10 15
Ala Leu Leu Asn Lys Arg Ile Ser Thr Gln Pro Gly Leu Thr Ala Leu
20 25 30
Pro Glu Asn Pro Asn Thr Thr Leu Pro Pro Phe Gln Asp Thr Pro Cys
35 40 45
Glu Leu Gln Pro Arg Ile Asp Pro Ser Leu Gly Gln Gln Val Lys Asp
50 55 60
Gly Leu Val Val Gly Gly Pro Gly Asp Ala Ser Val Asp Ala Ile Tyr
65 70 75 80
Lys Ala Val Val Asp Ala Ala Ser Lys Gly Met Gln Val Val Ile Thr
85 90 95
Thr Ala Val Asn Ser Thr Thr Gln Ile Ser Pro Ile Pro Ala Leu Ser
100 105 110
Ala Met Ser Ala Phe Thr Ala Ser Ile Gly Asp Pro Leu Asn Leu Ser
115 120 125
Ser Ala Val Ser Ala Val Ile His Gly Arg Asn Met Gly Gly Val Asp
130 135 140
His Asp Gly Arg Leu Arg Asn Ser Arg Gly Ala Arg Leu Pro Lys Asn
145 150 155 160
Leu

```

<210> 825

<211> 327

<212> DNA

<213> Homo sapiens

<400> 825

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gcgtttgcga ccggccgtaa cccgcagaat gcggcggtgt gttgcactga gggatatttg
60

```

cagttgctgg atgagcgcga gatgcgcggc gtgctcggcc acgagctgat gcacgtgtac
 120
 aaccgcgata tcttcacctc ttcgggtggc gcgggatcgc cctccatcat cggtacgatt
 180
 gcgcagattc tttcgtttgg cgcgatgttc ggtggatcca accgcgatgg tgaacgttcc
 240
 aacccccctc ccatgttcgt ggttgctatg ctggctccca ttgctactca ggtcatccag
 300
 atggctatta gccgcacccg tgaattc
 327

<210> 826

<211> 109

<212> PRT

<213> Homo sapiens

<400> 826

Ala	Phe	Ala	Thr	Gly	Arg	Asn	Pro	Gln	Asn	Ala	Ala	Val	Cys	Cys	Thr
1				5					10				15		
Glu	Gly	Ile	Leu	Gln	Leu	Leu	Asp	Glu	Arg	Glu	Met	Arg	Gly	Val	Leu
			20				25						30		
Gly	His	Glu	Leu	Met	His	Val	Tyr	Asn	Arg	Asp	Ile	Leu	Thr	Ser	Ser
			35				40					45			
Val	Ala	Ala	Gly	Ile	Ala	Ser	Ile	Ile	Gly	Thr	Ile	Ala	Gln	Ile	Leu
	50				55					60					
Ser	Phe	Gly	Ala	Met	Phe	Gly	Gly	Ser	Asn	Arg	Asp	Gly	Glu	Arg	Ser
65				70				75					80		
Asn	Pro	Leu	Ala	Met	Phe	Val	Val	Ala	Met	Leu	Ala	Pro	Ile	Ala	Thr
			85					90					95		
Gln	Val	Ile	Gln	Met	Ala	Ile	Ser	Arg	Thr	Arg	Glu	Phe			
			100					105							

<210> 827

<211> 534

<212> DNA

<213> Homo sapiens

<400> 827

nacgcgtacg tcaatatgca tcgtccagtc gttatcgcaa cgccgaaatc gatgctgcgc
 60
 aacaagatgg cgacctcgga tcccgaagag ttcaccaccc gtagggtggc tcctgttcta
 120
 cccgacccat cgatcaccga cccgacggcc gttacgagga ttatcttgtg ctctggcaag
 180
 gcgcgggtgg agctggtcaa gcaacgtaag gccgccagtc ttgacggaca gctcgccatc
 240
 atcccgatgg agcgtctcta cccgctacca gtcgacgagt tggtctgaggt ttttgcgcct
 300
 tacaccaacg tcacggatgt ccgctgggtc caagaagagc cagagaacca gggcgccctgg
 360
 tactacatgc tgaccacact gcccagggcc atgtcggaga agctgccagg attctttgat
 420
 gggttagtcg gcataccccc cccacggctc tcagctccgt cggtgggaca gcacagcgtc
 480

cacatccgtg aagagcagga gttactcgag aaggctatag cctgagcgac ctga
534

<210> 828

<211> 174

<212> PRT

<213> Homo sapiens

<400> 828

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Xaa Ala Tyr Val Asn Met His Arg Pro Val Val Ile Ala Thr Pro Lys
 1             5             10             15
Ser Met Leu Arg Asn Lys Met Ala Thr Ser Asp Pro Glu Glu Phe Thr
          20             25             30
Thr Gly Arg Trp Arg Pro Val Leu Pro Asp Pro Ser Ile Thr Asp Pro
          35             40             45
Thr Ala Val Thr Arg Ile Ile Leu Cys Ser Gly Lys Ala Arg Trp Glu
          50             55             60
Leu Val Lys Gln Arg Lys Ala Ala Ser Leu Asp Gly Gln Leu Ala Ile
          65             70             75             80
Ile Pro Met Glu Arg Leu Tyr Pro Leu Pro Val Asp Glu Leu Ala Glu
          85             90             95
Val Phe Ala Pro Tyr Thr Asn Val Thr Asp Val Arg Trp Val Gln Glu
          100            105            110
Glu Pro Glu Asn Gln Gly Ala Trp Tyr Tyr Met Leu Thr His Leu Pro
          115            120            125
Gln Ala Met Ser Glu Lys Leu Pro Gly Phe Phe Asp Gly Leu Val Gly
          130            135            140
Ile Thr Arg Pro Pro Ser Ser Ala Pro Ser Val Gly Gln His Ser Val
          145            150            155            160
His Ile Arg Glu Glu Gln Glu Leu Leu Glu Lys Ala Ile Ala
          165            170

```

<210> 829

<211> 492

<212> DNA

<213> Homo sapiens

<400> 829

```

nagtggccgg gtggccggcg ggtgccagcc gccatggagg ccgtgccccg catgccccatg
60
atctggctgg acctgaagga ggccggtgac ttctacttcc agccagctgt gaagaagttt
120
gtcctgaaga attatggaga gaaccacagaa gcctacaatg aagaactgaa gaagctggag
180
ttgtctcagac agaatgctgt ccgtgtccca cgagactttg agggctgtag tgtcctccgc
240
aagtaacctcg gccagcttca ttacctgcag agtcgggtcc ccattgggctc gggccaggag
300
gccgctgtcc ctgtcacatg gacagagatc ttctcaggca agtctgtggc ccatgaggag
360
atcaagtacg agcaggcctg tattttctcc aacnttggag cgctgcactc catgctgggg
420
gccatggaca agcgggtgtc tgaggagggc atgaaggtct cctgtaccca ttccagtgc
480

```

gcagccggcg cc
492

<210> 830
<211> 164
<212> PRT
<213> Homo sapiens

<400> 830
Xaa Trp Pro Gly Gly Arg Arg Val Pro Ala Ala Met Glu Ala Val Pro
1 5 10 15
Arg Met Pro Met Ile Trp Leu Asp Leu Lys Glu Ala Gly Asp Phe His
20 25 30
Phe Gln Pro Ala Val Lys Lys Phe Val Leu Lys Asn Tyr Gly Glu Asn
35 40 45
Pro Glu Ala Tyr Asn Glu Glu Leu Lys Lys Leu Glu Leu Leu Arg Gln
50 55 60
Asn Ala Val Arg Val Pro Arg Asp Phe Glu Gly Cys Ser Val Leu Arg
65 70 75 80
Lys Tyr Leu Gly Gln Leu His Tyr Leu Gln Ser Arg Val Pro Met Gly
85 90 95
Ser Gly Gln Glu Ala Ala Val Pro Val Thr Trp Thr Glu Ile Phe Ser
100 105 110
Gly Lys Ser Val Ala His Glu Asp Ile Lys Tyr Glu Gln Ala Cys Ile
115 120 125
Phe Ser Asn Xaa Gly Ala Leu His Ser Met Leu Gly Ala Met Asp Lys
130 135 140
Arg Val Ser Glu Glu Gly Met Lys Val Ser Cys Thr His Phe Gln Cys
145 150 155 160
Ala Ala Gly Ala

<210> 831
<211> 303
<212> DNA
<213> Homo sapiens

<400> 831
gcgttgctgc ggcgtggcga gaccatgacg gcggagaatc agcgtgccaa tgtgcgcatac
60
gccgcaaacc acatcaagga gggtgcggtc gatcacgagg tcgtgttagc ccatggtaata
120
ggccccccagg taggtctgtt ggctctgcaa tcgacagcct acgaggaagt cggatatctat
180
cgctgggatg tcctggggcg agagtcacag gccatgatcg gctacatgat cgagcaggaa
240
ctcgggcaatg tgatgcctca ggatcagcag atcgtcacca tgatcacgat gacagtgcgtc
300
gac
303

<210> 832
<211> 101
<212> PRT

<213> Homo sapiens

<400> 832

Ala Leu Leu Arg Arg Gly Glu Thr Met Thr Ala Glu Asn Gln Arg Ala
 1 5 10 15
 Asn Val Arg Ile Ala Ala Asn His Ile Lys Glu Val Ala Val Asp His
 20 25 30
 Glu Val Val Val Ala His Gly Asn Gly Pro Gln Val Gly Leu Leu Ala
 35 40 45
 Leu Gln Ser Thr Ala Tyr Glu Glu Val Gly Ile Tyr Pro Leu Asp Val
 50 55 60
 Leu Gly Ala Glu Ser Gln Ala Met Ile Gly Tyr Met Ile Glu Gln Glu
 65 70 75 80
 Leu Gly Asn Val Met Pro Gln Asp Gln Gln Ile Val Thr Met Ile Thr
 85 90 95
 Met Thr Val Val Asp
 100

<210> 833

<211> 466

<212> DNA

<213> Homo sapiens

<400> 833

nnatccgcg cgtatcgacga ggcgggtgctg tcatgttgac agcgaaaatg cgcagccggc
 60
 catttgacga gggctgaaaa cgtcttctac cggctctgctg tgccgcctgg tgctagcaaaa
 120
 cgcagccatg atcgctccagt gggatctcat ttgttctgctg cgcgtggggg attcagttgc
 180
 ggattccacc aggcggggtg gcatgttgctg cgcggcggttg agcagcagct gtcggcgctc
 240
 ctgacctatg tcatgaatct cgtcggcccc ggctcaaga ttcacatcga ccccgagcac
 300
 ccggagctgg gccaagacc accgcgaacc aagaagaaga gcggcgggcg agtgccgttc
 360
 gatgcgcagc tcggaactgg gtggatcgcc agcgagcccc ccgacgatcc cggctgcgaa
 420
 caactctacg tgtacgacgt caagaacctc agcggcgagc ggatcc
 466

<210> 834

<211> 142

<212> PRT

<213> Homo sapiens

<400> 834

Gln Arg Lys Cys Ala Ala Gly His Leu Thr Arg Ala Glu Asn Val Phe
 1 5 10 15
 Tyr Arg Ser Ala Val Pro Pro Gly Val Ser Lys Arg Arg His Asp Arg
 20 25 30
 Pro Val Gly Ile Asp Leu Phe Cys Gly Ala Gly Gly Phe Ser Cys Gly
 35 40 45
 Phe His Gln Ala Gly Trp His Val Ala Ala Ala Val Glu His Asp Val

```

      50              55              60
Ser Ala Ser Leu Thr Tyr Val Met Asn Leu Ala Arg Pro Gly Val Lys
65              70              75              80
Ile His Ile Asp Pro Glu His Pro Glu Leu Gly Pro Arg Pro Pro Arg
      85              90              95
Thr Lys Lys Lys Ser Gly Gly Ala Val Pro Phe Asp Ala His Val Gly
      100              105              110
Thr Gly Trp Ile Ala Ser Glu Pro Ala Asp Asp Pro Gly Cys Glu His
      115              120              125
Phe Tyr Val Tyr Asp Val Lys Asn Leu Ser Gly Glu Arg Ile
      130              135              140

```

<210> 835

<211> 482

<212> DNA

<213> Homo sapiens

<400> 835

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acgcgtgaag ggattttgat caccagaac aaccacctgt ctttttagat caagaagcag
60
aagctcagag caaagaacat cacaccacgt ccctcagtgta tgaagcagtg gattgagtc
120
cagaataaat ctggaactca ggtcttctga tctttgctcc agatgttaga gacaaaacta
180
aaagtaaaat accaagttaa atcaaagcat cacgattgag ccagaacat gaaaaagaac
240
ttcctggccc acttgagaaa ctgttaaacc ggacatacct ttggggactt cttcccttct
300
ctggaataag attgatgttt ccatgctgtg aaagacgatg atgttccttc tcccagattc
360
ctgctgtctt caaaaggcct agcaaaaacc actgctgctg ggtgcagttg agaaagggaa
420
tgaagaacaa tcccatggcc atgcaggcac tctcccctc cacctctctg cccttcacgc
480
gt
482

```

<210> 836

<211> 120

<212> PRT

<213> Homo sapiens

<400> 836

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Met Ala Met Gly Leu Phe Phe Ile Pro Phe Leu Asn Cys Thr Gln Gln
1              5              10              15
Gln Trp Phe Leu Leu Gly Leu Leu Lys Thr Ala Gly Ile Trp Glu Lys
      20              25              30
Glu His His Arg Leu Ser Gln His Gly Asn Ile Asn Leu Ile Pro Glu
      35              40              45
Lys Gly Arg Ser Pro Gln Arg Tyr Val Arg Phe Asn Ser Phe Ser Ser
      50              55              60
Gly Pro Gly Ser Ser Phe Ser Cys Ser Gly Leu Asn Arg Asp Ala Leu
65              70              75              80
Ile Ser Leu Gly Ile Leu Leu Leu Val Leu Ser Leu Thr Ser Gly Ala

```

```

      85              90              95
Lys Ile Arg Arg Pro Glu Phe Gln Ile Tyr Ser Val Thr Gln Ser Leu
      100              105              110
Leu Gln Ser Leu Arg Asp Val Val
      115              120

```

<210> 837
 <211> 509
 <212> DNA
 <213> Homo sapiens

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<400> 837
acgcgtggag ccccgcttctg cccgcctttg cagtcacgc cctccctgaa gtcaccgctg
60
cagaaatacg caggcactga cctgggggta cagccaggca agggagagac gaggggctca
120
ctctgcacca gccaaaggcct gtgtcctggc atggtcctccc caggaagcga ggatggcggt
180
gcctggcggt cgagcccctc ttatcctggg gaatgctggg gggcgcttct gagcagacct
240
gcctgctgcc cctgctggct ggcactgccc ctcccccgga gaaaggttgg gtgtccccc
300
caggggaact caaagcaggg gagccccctg agggcccaag tccctggaat atcttggcgc
360
tcagatggcc cccctcgaac accctcacac gggggggcgc gcggtggga ggtgaccag
420
cagccactct tacttggcga agacttttct cccaatgcga gcgcgggtgg tatcagcctg
480
agccttcagg ttggtgaggc tgggggtacc
509

```

<210> 838
 <211> 119
 <212> PRT
 <213> Homo sapiens

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<400> 838
Met Ala Pro Pro Gly Ser Glu Asp Gly Gly Ala Trp Arg Ser Ser Pro
1      5      10
Ser Tyr Pro Gly Glu Cys Trp Gly Ala Phe Leu Ser Arg Pro Ala Cys
20     25     30
Cys Pro Cys Trp Leu Ala Leu Pro Leu Pro Arg Gly Lys Val Gly Trp
35     40     45
Ser Pro Gln Gly Asn Ser Lys Gln Gly Ser Pro Trp Arg Pro Gln Val
50     55     60
Pro Gly Ile Ser Trp Arg Ser Asp Gly Pro Pro Arg Thr Pro Ser His
65     70     75     80
Gly Gly Ala Ala Arg Trp Glu Val Thr Gln Gln Pro Leu Leu Leu Gly
85     90     95
Glu Asp Phe Ser Pro Asn Ala Ser Ala Gly Gly Ile Ser Leu Ser Leu
100    105    110
Gln Val Gly Glu Ala Gly Val
115

```


<210> 839
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 839
 acgcgctctcg tgttcgtgcg gcacggcagg acggcggtca atgtggaggg tcggctccag
 60
 ggccgtctcg acatgccgtt g gatgaggtg gggcgccgtc aggcactcac agtgggtcaa
 120
 gtcatcgccg agatggaacc tgacgcgac atggcctctc cgctacaacg tgcgcgcgac
 180
 acagctcagg caatcggtgc ttgtgctgga ttggcgctac agctggatga tcgactcacc
 240
 gagatcgatg tcggacgttg gtcgggacaa cgggctgcgg acctgcgctg caacgatcct
 300
 gaggtagcag caagtgtggt cagccctatc gattaccggg tcggagn
 347

<210> 840
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 840
 Thr Arg Leu Val Phe Val Arg His Gly Arg Thr Ala Phe Asn Val Glu
 1 5 10 15
 Gly Arg Leu Gln Gly Arg Leu Asp Met Pro Leu Asp Glu Val Gly Arg
 20 25 30
 Arg Gln Ala Leu Thr Val Ala Gln Val Ile Ala Glu Met Glu Pro Asp
 35 40 45
 Ala Ile Met Ala Ser Pro Leu Gln Arg Ala Arg Asp Thr Ala Gln Ala
 50 55 60
 Ile Gly Ala Cys Ala Gly Leu Gly Val Gln Leu Asp Asp Arg Leu Ile
 65 70 75 80
 Glu Ile Asp Val Gly Arg Trp Ser Gly Gln Arg Ala Ala Asp Leu Arg
 85 90 95
 Arg Asn Asp Pro Glu Tyr Ala Ala Ser Val Val Ser Pro Ile Asp Tyr
 100 105 110
 Arg Val Gly
 115

<210> 841
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 841
 tccggaactc accccgacgc cgctcattatg gacgtcatga tgccgcgtct agatggcttg
 60
 gaagccaccg g gatgctgcg cagcaatggc aacgacgtcc cgatcctcgt cctcaccgcc
 120
 cgcgatgctg tcgacgatcg cgttgacggc ctcgacgctg gcgcccagta ctacatggtc
 180

aagcccttcg cctcgcagca actcctcgct cgcctacgcg ccctcactcg tcgttcccg
 240
 cccgagccag agcaaaacga ggccctgaa caactctcct tcgctgacct cacccttgat
 300
 ccaggcaccc gcgagatcac ccgcgggaac cgtegcacatca gtttgacgcg t
 351

<210> 842

<211> 117

<212> PRT

<213> Homo sapiens

<400> 842

Ser	Gly	Thr	His	Pro	Asp	Ala	Val	Ile	Met	Asp	Val	Met	Met	Pro	Arg
1				5					10					15	
Leu	Asp	Gly	Leu	Glu	Ala	Thr	Arg	Met	Leu	Arg	Ser	Asn	Gly	Asn	Asp
			20					25					30		
Val	Pro	Ile	Leu	Val	Leu	Thr	Ala	Arg	Asp	Ala	Val	Asp	Asp	Arg	Val
		35					40				45				
Asp	Gly	Leu	Asp	Ala	Gly	Ala	Asp	Asp	Tyr	Met	Val	Lys	Pro	Phe	Ala
	50					55					60				
Leu	Asp	Glu	Leu	Leu	Ala	Arg	Leu	Arg	Ala	Leu	Thr	Arg	Arg	Ser	Arg
	65				70				75					80	
Pro	Glu	Pro	Glu	Gln	Asn	Glu	Ala	Pro	Glu	Gln	Leu	Ser	Phe	Ala	Asp
			85						90					95	
Leu	Thr	Leu	Asp	Pro	Gly	Thr	Arg	Glu	Ile	Thr	Arg	Gly	Asn	Arg	Arg
			100				105						110		
Ile	Ser	Leu	Thr	Arg											
			115												

<210> 843

<211> 393

<212> DNA

<213> Homo sapiens

<400> 843

ctagcccagg ctctcgccca cgaggggctg cgcgctgtgg cctctggggc aaaccgggtc
 60
 ggcctcaagc gcggtatcga gaagggtgtc gacgccgttg tggaggagct ccgctctatc
 120
 tcgcgcgcca tcgacaccac ctccgacatg gccagcgttg ccaccatctc cagccgtgac
 180
 gagaccatcg ggcgcctcat cgctgaggcc ttgcacaagg ttgtaaggga cgggggttatc
 240
 accgtcgacg agtcgcagac cttcggcact gagcttgact tcaccgaggg catgcagttc
 300
 gacaagggtt acctgtcgcc ctacatggtc accgaccagg ttccgatgga ggctgtgatc
 360
 gaggatcctt acatcctcat tcaactcccgc aag
 393

<210> 844

<211> 131

<212> PRT

<213> Homo sapiens

<400> 844

```

Leu Ala Gln Ala Leu Val His Glu Gly Leu Arg Ala Val Ala Ser Gly
 1           5           10           15
Ala Asn Pro Val Gly Leu Lys Arg Gly Ile Glu Lys Ala Val Asp Ala
 20           25           30
Val Val Glu Glu Leu Arg Ser Ile Ser Arg Ala Ile Asp Thr Thr Ser
 35           40           45
Asp Ser Met Ala Ser Val Ala Thr Ile Ser Ser Arg Asp Glu Thr Ile Gly
 50           55           60
Ala Leu Ile Ala Glu Ala Phe Asp Lys Val Gly Lys Asp Gly Val Ile
 65           70           75           80
Thr Val Asp Glu Ser Gln Thr Phe Gly Thr Glu Leu Asp Phe Thr Glu
 85           90           95
Gly Met Gln Phe Asp Lys Gly Tyr Leu Ser Pro Tyr Met Val Thr Asp
100           105           110
Gln Val Arg Met Glu Ala Val Ile Glu Asp Pro Tyr Ile Leu Ile His
115           120           125
Ser Arg Lys
130

```

<210> 845

<211> 505

<212> DNA

<213> Homo sapiens

<400> 845

```

gccacctgcc caaggctgga tgacgggcct agggcacatc taaggaacaa ggacaggaca
60
gaagcaaaagc cacagctgct ggggcagggt gggggccgggt atgtctggcc agcagcatca
120
ccccgcccc cgggggggct ccaggaccgg gagactcatc agccggaagc tcttgaggga
180
ggcggctgcc gtgaagacag gcacctctgc tcctgagagg ggcacccaga gaaccaagac
240
tcagcagagg gaacacaggg ctacgcccag gccccaggcc tgatatccag agtctaaatc
300
ccacctcagc ccaggggggc gccttgagag gagctatgtc cctcatggac ccaggtttcc
360
tctgcatacg ggtccgagc cctgcactgc ctccagggtg gttcccaagg tcttttccca
420
ttacctccta cgtgagcact cagtaaacca atacacatac acaagggtga cattaattcc
480
agccacagaa tcccaggcca cgcgt
505

```

<210> 846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 846

```

Met Gly Lys Asp Leu Gly Asn Tyr Pro Gly Gly Ser Ala Gly Leu Gly

```

```

      1           5           10           15
Ala Arg Met Gln Arg Lys Leu Gly Ser Met Arg Asp Ile Ala Pro Leu
      20           25           30
Lys Ala Pro Pro Trp Ala Glu Val Gly Phe Arg Leu Trp Ile Ser Gly
      35           40           45
Leu Gly Pro Gly Arg Ser Pro Val Phe Pro Leu Leu Ser Leu Gly Ser
      50           55           60
Leu Gly Ala Pro Leu Arg Ser Lys Gly Ala Cys Leu His Gly Ser Arg
      65           70           75           80
Leu Leu Gln Glu Leu Pro Ala Asp Glu Ser Pro Gly Pro Gly Ala Pro
      85           90           95
Pro Gly Ala Gly Val Met Leu Leu Ala Arg His Thr Gly Pro His Pro
      100          105          110
Ala Pro Ala Ala Val Ala Leu Leu Leu Ser Cys Pro Cys Ser Leu Asp
      115          120          125
Val Pro
      130

```

<210> 847

<211> 448

<212> DNA

<213> Homo sapiens

<400> 847

```

aagcttttaa aggagcaaga aaacatgaaa gagctagtag tcaaccttct cgcgatgact
60
caaatcaaaa ttgatgaaaa ggaacaaaaaag tccaaggatt tctgtaaaag tcagcaaaaa
120
tacaccaaca ttgttaaaga aatgaaagca aaggatcttg aaatcaggat acacaagaag
180
aaaaaatgtg aaatttatcg gagactgaga gagcttgcta aactgtatga caccatttga
240
aatgaaagaa acaaatattgt taacttactc cacaaagctc atcagaaagt aaatgaaata
300
aaagaaaggc ataaaatgtc attaaatgaa cttgaaatc tgagaaatag tgcggttagt
360
caagaaagaa agctacaaaa ttccatgctg aaacacgcca acaatgttac catcagagag
420
agcatgcaaa acgatgtgcg caaaattt
448

```

<210> 848

<211> 149

<212> PRT

<213> Homo sapiens

<400> 848

```

Lys Leu Leu Lys Glu Gln Glu Asn Met Lys Glu Leu Val Val Asn Leu
      1           5           10           15
Leu Arg Met Thr Gln Ile Lys Ile Asp Glu Lys Glu Gln Lys Ser Lys
      20           25           30
Asp Phe Leu Lys Ala Gln Gln Lys Tyr Thr Asn Ile Val Lys Glu Met
      35           40           45
Lys Ala Lys Asp Leu Glu Ile Arg Ile His Lys Lys Lys Cys Glu

```

```

      50              55              60
Ile Tyr Arg Arg Leu Arg Glu Leu Ala Lys Leu Tyr Asp Thr Ile Arg
65              70              75              80
Asn Glu Arg Asn Lys Phe Val Asn Leu Leu His Lys Ala His Gln Lys
      85              90              95
Val Asn Glu Ile Lys Glu Arg His Lys Met Ser Leu Asn Glu Leu Glu
      100              105              110
Ile Leu Arg Asn Ser Ala Val Ser Gln Glu Arg Lys Leu Gln Asn Ser
      115              120              125
Met Leu Lys His Ala Asn Asn Val Thr Ile Arg Glu Ser Met Gln Asn
      130              135              140
Asp Val Arg Lys Ile
145

```

<210> 849

<211> 463

<212> DNA

<213> Homo sapiens

<400> 849

```

nnacgcgtga ttgttggggc caaggaatgc catgtggaga gtgcaggtga agtgataagt
60
cttttggaga tggggaatgc agccagacat acaggtacca ctcaaatgaa tgagcactcc
120
agcagatcac atgcaatddd tacaatcagc atttgtcaag ttcataaaaa tatggaggca
180
gctgaagatg gatcatgcta tccccctcgg catattgtct caaagtccca ctttgtggat
240
ttggcaggat cagaaagagt aacccaaacg gggaataactg gtgaacgggt caaagaatcc
300
attcaaatca atagtggatt gctggcttta ggaaatgtaa taagcgctct tggggaccga
360
cgcaggaaga gttcacatat tccatatagg gatgctaaaa ttaccggcgt tctgaaagat
420
tctctgggag gcagtgctaa gactgtcatg atcacatgtg tca
463

```

<210> 850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 850

```

Xaa Arg Val Ile Val Gly Ala Lys Glu Cys His Val Glu Ser Ala Gly
1              5              10              15
Glu Val Ile Ser Leu Leu Glu Met Gly Asn Ala Ala Arg His Thr Gly
      20              25              30
Thr Thr Gln Met Asn Glu His Ser Ser Arg Ser His Ala Ile Phe Thr
      35              40              45
Ile Ser Ile Cys Gln Val His Lys Asn Met Glu Ala Ala Glu Asp Gly
      50              55              60
Ser Trp Tyr Ser Pro Arg His Ile Val Ser Lys Phe His Phe Val Asp
65              70              75              80
Leu Ala Gly Ser Glu Arg Val Thr Lys Thr Gly Asn Thr Gly Glu Arg

```

```

      85              90              95
Phe Lys Glu Ser Ile Gln Ile Asn Ser Gly Leu Leu Ala Leu Gly Asn
      100              105              110
Val Ile Ser Ala Leu Gly Asp Pro Arg Arg Lys Ser Ser His Ile Pro
      115              120              125
Tyr Arg Asp Ala Lys Ile Thr Arg Leu Leu Lys Asp Ser Leu Gly Gly
      130              135              140
Ser Ala Lys Thr Val Met Ile Thr Cys Val
145              150

```

<210> 851

<211> 372

<212> DNA

<213> Homo sapiens

<400> 851

```

aaatttcctg tttctgatcg acgaaataaa gtttagcgtg atgagtgagc tgcttatgca
60
gttcctccat tcgcttataa acagttttat ttctcatttc gaaaactctc gatgcagaat
120
aaaggctaga gtctggggac caagtcccca gctccgttta cgcgacttcc ttgaccttgt
180
ttgcttatgct gataagggtta ttcagcttga cgatttggtc gtggtctttc aaccgttttg
240
cagctggtcg acgatattcc tggtaggaac tacgatagaa gaccagcacc ggaagaactt
300
tgtatagctg gaacaaacac ccaccgatca cttcagcttc gaagtaaggg ttatactgtc
360
taaccacgcg gt
372

```

<210> 852

<211> 110

<212> PRT

<213> Homo sapiens

<400> 852

```

Met Ser Glu Leu Leu Met Gln Phe Leu His Ser Leu Ile Asn Ser Phe
1      5      10      15
Ile Ser His Phe Glu Asn Ser Arg Cys Arg Ile Lys Ala Arg Val Trp
      20      25      30
Gly Pro Ser Pro Gln Leu Arg Leu Arg Asp Phe Leu Asp Leu Val Cys
      35      40      45
Tyr Ala Asp Lys Val Ile Gln Leu Asp Asp Leu Phe Val Val Phe Gln
      50      55      60
Pro Phe Cys Ser Trp Ser Thr Ile Phe Leu Val Gly Thr Thr Ile Glu
      65      70      75      80
Asp Gln His Arg Lys Asn Phe Val Asp Ala Glu Gln Thr Pro Thr Asp
      85      90      95
His Phe Ser Leu Glu Val Arg Val Ile Leu Ser Asn Pro Arg
      100      105      110

```

<210> 853

<211> 423

<212> DNA

<213> Homo sapiens

<400> 853

acgcgttcag aaacttatgg tgaatggcc gaactagaaa acctagtcga cgaatattac
 60
 caagctatgg gcatggatgt gcgtcgagaa acctggctgc gcgagcagat actcaagaaa
 120
 gtccaagaaa cgcatttgtt agaagagctt gcagggcatag aatcaggtga tgatggcgca
 180
 gtgggtggaag agagcgtatt agaaggcctc gatacctatt tatgtgagat aaaagaagca
 240
 cagattcgtc atggattgca tcgtcttga gaattaccag aagacgataa attggccgat
 300
 accttggtcg ccttattgcy tttaccccg ggagtgaca ttaccagcaa gggaattttg
 360
 catgccttaa tggcagattt agagttagaa caagacgatt ttgacccaat gcaaagcacg
 420
 cgt
 423

<210> 854

<211> 141

<212> PRT

<213> Homo sapiens

<400> 854

Thr	Arg	Ser	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Glu	Leu	Glu	Asn	Leu	Val
1			5					10					15		
Asp	Glu	Tyr	Tyr	Gln	Ala	Met	Gly	Met	Asp	Val	Arg	Arg	Glu	Thr	Trp
		20					25					30			
Leu	Arg	Glu	Gln	Ile	Leu	Lys	Lys	Val	Gln	Glu	Thr	His	Leu	Leu	Glu
		35				40					45				
Glu	Leu	Ala	Gly	Ile	Glu	Ser	Gly	Asp	Asp	Gly	Ala	Val	Val	Glu	Glu
		50				55				60					
Ser	Val	Leu	Glu	Gly	Leu	Asp	Thr	Tyr	Leu	Cys	Glu	Ile	Lys	Glu	Ala
		65		70					75					80	
Gln	Ile	Arg	His	Gly	Leu	His	Arg	Leu	Gly	Glu	Leu	Pro	Glu	Asp	Asp
			85					90						95	
Lys	Leu	Ala	Asp	Thr	Leu	Val	Ala	Leu	Leu	Arg	Leu	Pro	Arg	Gly	Ser
			100				105					110			
Asp	Ile	Thr	Ser	Lys	Gly	Ile	Leu	His	Ala	Leu	Met	Ala	Asp	Leu	Glu
		115				120						125			
Leu	Glu	Gln	Asp	Asp	Phe	Asp	Pro	Met	Gln	Ser	Thr	Arg			
		130				135						140			

<210> 855

<211> 338

<212> DNA

<213> Homo sapiens

<400> 855

acgcgtgaag ggggagctca aagtagatgg acctctgact agatggagct ctgagtaaga
 60

tgaatgtctg tgcggatggt gctcacagca agatagtgtc tggagcgatt ggcacttcga
 120
 acaagatgga gcatggagca gatggagctc tgagcaagat ggagcgtgga gtagatagag
 180
 cttggagcaa gaaggagctc caagcaagat ggagcttgca gcaggtgctt ctcagtgtaa
 240
 gatggagctc agagaagatg atgctcagag taagattgag ctcggtgatt ggcactccaa
 300
 acattgtctt gagcccattg gagnetctga gcagaaaag
 338

<210> 856

<211> 93

<212> PRT

<213> Homo sapiens

<400> 856

Met	Asn	Val	Cys	Ala	Asp	Val	Ala	His	Ser	Lys	Ile	Val	Leu	Gly	Ala
1			5						10				15		
Ile	Gly	Thr	Ser	Asn	Lys	Met	Glu	His	Gly	Ala	Asp	Gly	Ala	Leu	Ser
			20				25						30		
Lys	Met	Glu	Arg	Gly	Val	Asp	Arg	Ala	Trp	Ser	Lys	Lys	Glu	Leu	Gln
	35					40				45					
Ala	Arg	Trp	Ser	Leu	Gln	Gln	Val	Leu	Leu	Ser	Val	Arg	Trp	Ser	Ser
	50				55					60					
Glu	Lys	Met	Met	Leu	Arg	Val	Arg	Leu	Ser	Ser	Val	Ile	Gly	Thr	Pro
65				70				75						80	
Asn	Ile	Ala	Leu	Ser	Pro	Leu	Glu	Xaa	Leu	Ser	Arg	Lys			
			85					90							

<210> 857

<211> 435

<212> DNA

<213> Homo sapiens

<400> 857

cgggacagtg ggccaccagt gtttgcccc agcaatcatg tcagtgaagc ccaacctcgg
 60
 gagacacccc ggccctctcat gcctctctacc aagcctttcc tagcacctga gaccaccagc
 120
 cctgggtgaca ggggtggagac ccctgtgggg gagagagccc caacccctgt ctcagcaagg
 180
 tctgaggtct cccctgagag ccaagaggac tcagagaccc cagcagagga ggacagtggc
 240
 tctgagcagc ctcccaacag cgtcctgcct gacaaaactga aggtgagctg ggagaacccc
 300
 agcccccagg agggccctgc tgcagagagt gcagaaccgt cccaggcacc ctgttctgag
 360
 acttctgagg ctgccccag ggaggggtggg aagcccccta cccccccacc caagatctta
 420
 tcagagaaac tga
 435

<210> 858

<211> 145

<212> PRT

<213> Homo sapiens

<400> 858

```

Pro Asp Ser Gly  Pro Pro Val Phe Ala  Pro Ser Asn His Val Ser Glu
 1          5          10          15
Ala Gln Pro  Arg Glu Thr  Pro Arg  Pro Leu Met  Pro Pro Thr Lys Pro
          20          25          30
Phe Leu Ala  Pro Glu Thr  Thr Ser  Pro Gly Asp Arg Val Glu Thr Pro
          35          40          45
Val Gly Glu  Arg Ala Pro Thr  Pro Val Ser Ala Ser Ser Glu Val Ser
          50          55          60
Pro Glu Ser  Gln Glu Asp Ser Glu Thr  Pro Ala Glu Glu Asp Ser Gly
65          70          75          80
Ser Glu Gln  Pro Pro Asn Ser Val Leu  Pro Asp Lys Leu Lys Val Ser
          85          90          95
Trp Glu Asn  Pro Ser Pro Gln Glu Ala  Pro Ala Ala Glu Ser Ala Glu
          100          105          110
Pro Ser Gln  Ala Pro Cys Ser Glu Thr  Ser Glu Ala Ala Pro Arg Glu
          115          120          125
Gly Gly Lys  Pro Pro Thr Pro Pro Pro Lys Ile  Leu Ser Glu Lys Leu
          130          135          140

```

Lys

145

<210> 859

<211> 561

<212> DNA

<213> Homo sapiens

<400> 859

```

naccgctggt gtggaatcc ggtttctggt ggcgacggct gccacccttc gtggcaagac
60
atgcgcgtgc gtgcgatata gccatacgaa gcttgcccta gtgcgaaag ctcgctggaa
120
ccctcgaaga ggcagggtcg gcagggtacc gtggtcggtg tacgcatcgt ttcgacgatg
180
aacccattc tgggagcaga tatgacgacg taccagtacc tcattgtcgg tggcgggatg
240
gccgctgatt ctgcgcgccg cggtatccgc gacatcgaca agaaagggtc gatcgccatc
300
ctcagcgcgt acgtcgacgc ccggtatcct cggccagcgc tgagcaagaa gctgtggact
360
gacctgtagt tcacctggga ccagggtcgac cttgctactg tcgctgacac cggcgcgga
420
ttgcggtcgc gcactgaggt gctcagcatt gaccgtgacg gcaagaccgt cctgaccgct
480
tccggccagg tattcggcta ccagaagttg ctgctcggtta cgggccttac ccgctgcgcg
540
attgacgacg acggcgatgc c
561

```

<210> 860

<211> 187

<212> PRT

<213> Homo sapiens

<400> 860

```

Xaa Ala Trp Cys Gly Asn Pro Val Ser Gly Gly Asp Gly Cys His Pro
 1           5           10
Ser Trp Gln Asp Met Pro Leu Arg Ala Asp Met Pro Tyr Glu Ala Trp
      20           25           30
Pro Ser Ala Lys Ser Ser Leu Glu Pro Ser Lys Arg Gln Gly Arg Gln
      35           40           45
Val Thr Val Val Gly Val Arg Ile Val Ser Thr Met Asn Pro Ile Leu
      50           55           60
Gly Ala Asp Met Thr Thr Tyr Gln Tyr Leu Ile Val Gly Gly Gly Met
65           70           75           80
Ala Ala Asp Ser Ala Ala Arg Gly Ile Arg Asp Ile Asp Lys Lys Gly
      85           90           95
Ser Ile Ala Ile Leu Ser Ala Asp Val Asp Ala Pro Tyr Pro Arg Pro
      100          105          110
Ala Leu Ser Lys Lys Leu Trp Thr Asp Pro Glu Phe Thr Trp Asp Gln
      115          120          125
Val Asp Leu Ala Thr Val Ala Asp Thr Gly Ala Glu Leu Arg Leu Gly
      130          135          140
Thr Glu Val Leu Ser Ile Asp Arg Asp Gly Lys Thr Val Leu Thr Ala
      145          150          155          160
Ser Gly Gln Val Phe Gly Tyr Gln Lys Leu Leu Leu Val Thr Gly Leu
      165          170          175
Thr Pro Ser Arg Ile Asp Asp Asp Gly Asp Ala
      180          185

```

<210> 861

<211> 352

<212> DNA

<213> Homo sapiens

<400> 861

```

ccatgggttt ctatgctctg aggtttctatc tgtggggaac agtattgact tacttacaa
60
gagataatgg tcatacccta tggctactca ccatagctctg gcggtacatg gacttctcag
120
ccccagtaag atctgtatcc acaggacact taaagtcacc ttacagaggg ctatcccatg
180
gcctgaggcc tatttagaggc gtctcttttc agccatcagt gtttagaggcc atctgcatgg
240
gatcccagag cctgcctcgg gaatggcaga agctggctgg tgcttggcgt gggctttgcc
300
tgtttctactg ctttcaggga ggccctgccac aggggagaaaa ctgggggggg ga
352

```

<210> 862

<211> 116

<212> PRT

<213> Homo sapiens

<400> 862

```

Met Gly Phe Tyr Ala Leu Arg Phe His Leu Trp Gly Thr Val Leu Thr
 1           5           10           15
Tyr Leu Gln Arg Asp Asn Gly His Thr Leu Trp Ser Leu Thr Ile Val
           20           25           30
Trp Arg Tyr Met Asp Phe Ser Ala Pro Val Arg Ser Val Ser Thr Gly
 35           40           45
His Leu Lys Ser Pro Tyr Arg Gly Leu Ser Gln Cys Leu Arg Pro Ile
 50           55           60
Arg Gly Val Ser Phe Gln Pro Ser Val Leu Glu Ala Ile Cys Met Gly
 65           70           75           80
Ser Gln Ser Leu Pro Arg Glu Trp Gln Lys Leu Ala Gly Ala Trp Arg
           85           90           95
Gly Leu Cys Leu Phe His Cys Phe Gln Gly Gly Leu Pro Gln Gly Arg
100           105           110
Asn Trp Gly Gly
115

```

<210> 863

<211> 327

<212> DNA

<213> Homo sapiens

<400> 863

```

tccggatcga cccggacgaa ttccacgggc cagccattga cttccaaatg ctctttgaca
60
tacgccgtga catgttcaat gtccaactta cgcattgtcca cccgctcacc ggtctcattg
120
agtttgagct gcgagtagac gttgcggtag ttctcgttga ccgactgctc atacgagatg
180
tgcagaagca tcggtttgcg gccatcctcg gacggcattg gcttggttga catggccgct
240
tgccggaaca tggtcagggt aaagcccgac ttgaagttgt gcgacagggc agaaacacac
300
agcatttctg accggcgatg acccatn
327

```

<210> 864

<211> 108

<212> PRT

<213> Homo sapiens

<400> 864

```

Met Gly His Arg Arg Ser Glu Met Leu Cys Val Ser Ala Leu Ser His
 1           5           10           15
Asn Phe Lys Ser Gly Phe Thr Leu Asn Met Phe Arg Gln Ala Ala Met
           20           25           30
Tyr Asn Lys Pro Met Pro Ser Glu Asp Gly Arg Lys Pro Met Leu Leu
 35           40           45
His Ile Ser Tyr Glu Gln Ser Val Asn Glu Asn Tyr Arg Asn Val Tyr
 50           55           60
Ser Gln Leu Lys Leu Asn Glu Thr Gly Glu Arg Val Asp Met Arg Lys
 65           70           75           80
Leu Asp Ile Glu His Val Thr Ala Tyr Val Lys Glu His Leu Glu Val

```

85 90 95
 Asn Gly Trp Thr Val Glu Phe Val Arg Val Asp Pro
 100 105

<210> 865
 <211> 729
 <212> DNA
 <213> Homo sapiens

<400> 865
 acgcgtcattc ctcattcaag agggccagga ggagcaccac cctccgcata ttgcgcggtgc
 60
 agctctcgtt ctgggtctctg agcatgcccc cggcgctctg cacacagctt ctcagcagcc
 120
 tgggtgggtgc caggatcgac acatcactgc ctccgagttc agaggtttcc tttcccacct
 180
 tctcagaact ttctgtttcc atggcctcct ctgccacctc tgccacctcc cctgatgtgc
 240
 tggcctccgt ctccatcgcc tctcatggc cgtcttcgc cgggtgttcc aagcccagct
 300
 caggcaagtc tccgggcgcg aacagctggc tgatgggtgac atgctgcagc ctggtcacat
 360
 cagaaacat gaggggtggat ctccggaggt catcgatgtg gacagactgc cacagccctc
 420
 cgtggaagcc cacataggct gttcctcttc caccgccgga cagttttgtg atgaaataga
 480
 cgaagatacg gtcctcattt tctcgtattt tgttgatttc atttataaca gaatacttag
 540
 ctgaggcaat gagctgggcg ctacggattc catcttcaaa atctgtctga aaaatgagga
 600
 ttttacattt ggctgtattc gttaaacagt ttcggacttc tttgaggaat gactactcgg
 660
 tgtcaaaactg ctgcagccac agggagtgtgg gtttcggagc cctgcctgtg acctctgatt
 720
 ctaaaattt
 729

<210> 866
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 866
 Ala Cys Pro Arg Arg Ser Ala His Ser Phe Ser Ala Ala Trp Trp Cys
 1 5 10 15
 Pro Gly Ser Thr His His Cys Leu Arg Val Gln Arg Phe Pro Phe Pro
 20 25 30
 Pro Ser Gln Asn Phe Leu Phe Pro Trp Pro Pro Leu Pro Pro Leu Pro
 35 40 45
 Pro Pro Leu Met Cys Trp Pro Pro Ser Pro Ser Pro Pro His Gly Arg
 50 55 60
 Leu Pro Pro Gly Val Pro Ser Pro Ala Gln Ala Ser Leu Arg Ala Arg
 65 70 75 80
 Thr Ala Gly

<210> 867
 <211> 640
 <212> DNA
 <213> Homo sapiens

<400> 867
 nntccggaac atcaagatcc aggcgcagaa gaccgtcaga agctgcactg gccacctcct
 60
 tcagggtggac tctcgttggt ggccggcgctc gctggccccc tcgcaccocgg tcccggtgta
 120
 catgctccag ggccgcagctc ttgtccacct ttacctcacc gaaagccttg tttttgcctc
 180
 gggttaatecc ttcattgagg gctttgatcc aggatctcct ctctccccc gtgggtgcct
 240
 ggaatttgat gtcgctgacc ttgttccctg gggatcgag caggataaag cggtgttttc
 300
 gcttgaggag ggcacgaagg tcttggcact tctcatagct gccacagctc acagtctcca
 360
 cacacttctg atcaccctca ttctcataga ccagcagctg ggcttggcag aggagcagat
 420
 atcgggtcttt ccagaaaccc agggaggcccc cactgctctt cttgatccag ccagccttgt
 480
 ccaccatctg tgctcccccga ggcttctcac cggtctcctt cacaccctcc tcctccatgg
 540
 cgagtcgccg gaggtcccg cgtctcccca ctcgcttcca gcgcgcgcgc ggctctgcca
 600
 ccgcgtctac gcccggccag gcggcgactc tccgcgttct
 640

<210> 868
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 868
 Gly Gly His Glu Gly Pro Gly Thr Ser His Ser Cys Pro Ala Pro Gln
 1 5 10 15
 Ser Pro His Thr Ser Asp His Pro His Ser His Arg Pro Ala Ala Gly
 20 25 30
 Pro Gly Arg Gly Ala Asp Ile Gly Leu Ser Arg Asn Pro Gly Gly Pro
 35 40 45
 His Cys Ser Ser
 50

<210> 869
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 869
 nggggtgatgc tgctcgcggc attgagcacc tttgtgctca gcgcgctgtt tategacaac
 60

ttcctgtcgc cgctgaatat gcgcgggctg ggccctggcga ttctgaacggt gggcatcgct
 120
 gcgtgcacca tgctgttctg cctggcgctg gggcatttgc acttgctggt gggctcggtg
 180
 atcgctgtg ccggtgtggt cgcggggatt gtgattcgtg acaccgatag cgtggcactc
 240
 ggctgtgtccg ctgcgttggc catgggctg gtagtggggc tgatcaacgg catcgtgatc
 300
 gccaaagctgc gcatcaacgc g
 321

<210> 870

<211> 107

<212> PRT

<213> Homo sapiens

<400> 870

Xaa	Val	Met	Leu	Leu	Ala	Ala	Leu	Ser	Ile	Phe	Val	Leu	Ser	Ala	Leu
1				5					10					15	
Phe	Ile	Asp	Asn	Phe	Leu	Ser	Pro	Leu	Asn	Met	Arg	Gly	Leu	Gly	Leu
			20						25				30		
Ala	Ile	Ser	Thr	Val	Gly	Ile	Ala	Ala	Cys	Thr	Met	Leu	Phe	Cys	Leu
		35					40						45		
Ala	Ser	Gly	His	Phe	Asp	Leu	Ser	Val	Gly	Ser	Val	Ile	Ala	Cys	Ala
		50					55				60				
Gly	Val	Val	Ala	Gly	Ile	Val	Ile	Arg	Asp	Thr	Asp	Ser	Val	Ala	Leu
65					70				75					80	
Gly	Val	Ser	Ala	Ala	Leu	Ala	Met	Gly	Leu	Val	Val	Gly	Leu	Ile	Asn
			85						90					95	
Gly	Ile	Val	Ile	Ala	Lys	Leu	Arg	Ile	Asn	Ala					
			100						105						

<210> 871

<211> 320

<212> DNA

<213> Homo sapiens

<400> 871

agatcttcag agtctctgctc ttttaaatgg gggtaacagc agcaagctct cagagggtgc
 60
 ctgagcctca aaacacatcc tggtttgtaa cgtccgcagc ctcagcaggg gctaggcaca
 120
 gaacaagcat tcaggacctg gaaggtacca gcgacacctg gtcctccctt cccaggcaca
 180
 aggcagcccc tctccattca agctctgccc cagcccagca aagagagggg tctcagcga
 240
 ctgccccac cactaccaca atcatactca cctctcctgg tccatactg acaaaggacc
 300
 tgccacggcc agggagacaa
 320

<210> 872

<211> 98

<212> PRT

<213> Homo sapiens

<400> 872

```

Met Gly Val Thr Ala Ala Ser Pro Gln Arg Cys Pro Glu Pro Gln Asn
 1             5             10             15
Thr Ser Trp Phe Val Thr Ser Ala Ala Ser Ala Gly Ala Arg His Arg
 20             25             30
Thr Ser Ile Gln Asp Leu Glu Gly Thr Ser Asp Thr Trp Ser Ser Leu
 35             40             45
Pro Arg His Lys Ala Ala Pro Leu His Ser Ser Ser Ala Pro Ala Gln
 50             55             60
Gln Arg Glu Gly Ser Ser Ala Thr Ala Pro Thr Thr Thr Thr Ile Ile
 65             70             75             80
Leu Thr Ser Pro Gly Pro Tyr Val Thr Lys Asp Leu Pro Arg Pro Gly
 85             90             95

```

Arg Gln

<210> 873

<211> 363

<212> DNA

<213> Homo sapiens

<400> 873

```

nttgtttagc atcgtttttt acgggtgtat cagcgcggtt agcagcggtt ttagcgggatg
 60
catcagcatg ttttgcgtca cgttttacaa ctgtgctacc gtgttttagca tcattttttga
 120
cggagggtatc aatacgttta gcatcggttt taacagatgt atcaacacgg ggttcacccg
 180
cttttagcaga atccccagct cttagtagcca ctttagatac ttcagatttt atatgagtcg
 240
cagttgttttc agcgtgagcc atgctgaatg tagaaccaag ggccaatgta attgctaaag
 300
acaaagataa tttatttagt ttcatgttcg gagagaagtg tgccaattcg gcgatacagt
 360
cag
 363

```

<210> 874

<211> 108

<212> PRT

<213> Homo sapiens

<400> 874

```

Met Lys Leu Asn Lys Leu Ser Leu Ala Ile Thr Leu Ala Leu
 1             5             10             15
Gly Ser Thr Phe Ser Met Ala His Ala Glu Thr Thr Ala Thr His Ile
 20             25             30
Lys Ser Glu Val Ser Lys Val Ala Thr Arg Ala Gly Asp Ser Ala Lys
 35             40             45
Ala Asp Glu Pro Arg Val Asp Thr Ser Val Lys Asn Asp Ala Lys Arg
 50             55             60
Ile Asp Thr Ser Val Lys Asn Asp Ala Lys His Gly Ser Thr Val Val

```

```

65          70          75          80
Lys Arg Asp Ala Lys His Ala Asp Ala Ser Ala Lys Asn Ala Ala Lys
          85          90          95
Arg Ala Asp Thr Pro Val Lys Asn Asp Ala Lys Gln
          100          105

```

<210> 875

<211> 355

<212> DNA

<213> Homo sapiens

<400> 875

```

acgcgtgaag gggaccctaa ctgctctggg ctgtaggatg cgggcgaggc ttccacaaac
60
tcactgtctg ggggagaaga aaagcagaaa acaactcgaa tcgctaccat tcaggacgaa
120
ccgcaccaagc accagctcaa cgcgcaggtcc ccgggaaaaa cgcggggctt ctctctccca
180
gcgctcagaa tccttgagcc ggaggccccc cgggattcag accgccagat cccaggaggag
240
tgacaaatcg ccgcagaaac ttgggggaca actcgccctt ggcaccgcgc ggcttccagg
300
cgcgggcagg cgcgcgcaa ctttccccgc gtgccacccc gcggctcccc cggen
355

```

<210> 876

<211> 106

<212> PRT

<213> Homo sapiens

<400> 876

```

Met Arg Ala Arg Leu Pro Gln Thr His Cys Leu Gly Glu Lys Lys Ser
1          5          10          15
Arg Lys Gln Leu Glu Ser Leu Pro Phe Arg Thr Asn Pro Pro Ser Thr
20          25          30
Ser Ser Ser Ala Gly Pro Arg Glu Lys Ala Arg Ala Ser Leu Ser Gln
35          40          45
Arg Ser Glu Ser Leu Ser Arg Arg Pro Arg Gly Ile Gln Thr Ala Arg
50          55          60
Ser Pro Gly Ser Asp Lys Ser Pro Gln Lys Leu Gly Gly Gln Leu Gly
65          70          75          80
Pro Gly Thr Ala Arg Leu Pro Gly Ala Gly Arg Arg Ala Pro Thr Phe
85          90          95
Pro Ala Cys His Pro Ala Ala Pro Pro Ala
100          105

```

<210> 877

<211> 487

<212> DNA

<213> Homo sapiens

<400> 877

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acgcgtactt tgggtaatga actgacgacc gctgagatcg actgccttta tctgtgttac
60

```


caatccacct atgctaaacg tggtcagcaa gggtatctca caccagaatt ctttggtttg
 120
 ttggccaata ccatgggaga tcaaatcctt ttagtacagg cgtacagaga aggcgaagcg
 180
 atgcgcgcgt cgtggtgttt ctttgatgat cattcactat atgggcgtta ttggggctgt
 240
 atggaagaag tggattgcct gcattttgaa gcttggtatt accaaggaat cgagttttgt
 300
 ctggaaaaaa ggttacagca ttctgatccg ggtacacaag gggaacacaa gattgcgcgc
 360
 ggctttgaac ctgttttttag ccacagcgtg cattacattg ctcacaaagg ttttcgtgaa
 420
 gcgattggga atttctgtga ggaagaagcg caagctgtgc gcgagtatca tcaagatacc
 480
 cacgcgt
 487

<210> 878
 <211> 162
 <212> PRT
 <213> Homo sapiens

<400> 878
 Thr Arg Thr Leu Gly Asn Glu Leu Thr Thr Ala Glu Ile Asp Cys Leu
 1 5 10 15
 Tyr Leu Cys Tyr Gln Ser Thr Tyr Ala Lys Arg Gly Gln Gln Gly Tyr
 20 25 30
 Leu Thr Arg Glu Phe Phe Gly Leu Leu Ala Asn Thr Met Gly Asp Gln
 35 40 45
 Ile Leu Leu Val Gln Ala Tyr Arg Glu Gly Glu Ala Ile Ala Ala Ser
 50 55 60
 Trp Cys Phe Phe Asp Asp His Ser Leu Tyr Gly Arg Tyr Trp Gly Cys
 65 70 75 80
 Met Glu Glu Val Asp Cys Leu His Phe Glu Ala Cys Tyr Tyr Gln Gly
 85 90 95
 Ile Glu Phe Cys Leu Glu Lys Gly Leu Gln His Phe Asp Pro Gly Thr
 100 105 110
 Gln Gly Glu His Lys Ile Ala Arg Gly Phe Glu Pro Val Phe Ser His
 115 120 125
 Ser Val His Tyr Ile Ala His Gln Gly Phe Arg Glu Ala Ile Gly Asn
 130 135 140
 Phe Cys Glu Glu Glu Ala Gln Ala Val Arg Glu Tyr His Gln Asp Thr
 145 150 155 160
 His Ala

<210> 879
 <211> 993
 <212> DNA
 <213> Homo sapiens

<400> 879
 nncttagcat ttaagccaac gaggcagcta atgtcctctg aacagcaaag gaaattcagc
 60

agccagtcga gtagggctct gacccctcct tcttacagta ctgctaaaaa ttcattggga
 120
 tcaagatcca gtgaatcctt tggaagtagc acatcgccag taatgagtga gcattggggac
 180
 gagcacaggc agctcctctc tcacccaatg caaggccctg gactccgtgc agctacctca
 240
 tccaaccact ctgtggacga gcaactgaag aatactgaca cgcacctcat cgacctggta
 300
 accaatgaga ttatcaccca aggacctcca gtggactgga atgacattgc tgggtctcgac
 360
 ctgggtgaag ctgtcattaa agaggagggt ttatggccag tgttgaggtc agacgcgttc
 420
 agtggactga cggccttacc tcggagcatc cttttatttg gacctcgggg gacaggcaaa
 480
 acattattgg gcagatgcat cgctagtcag ctgggggcca catttttcaa aattgcccgt
 540
 tctggactag tcgccaagggt gttaggagaa gcagagaaaa ttatccatgc ctcttttctt
 600
 gtggccagggt gtcgccagcc ctccggtgatt tttgttagtg acattgacat gcttctctcc
 660
 tctcaagtga atgaggaaca tagtccagtc agtcggatga gaaccaatt tctgatgcaa
 720
 ctggacactg tactaacttc ggctgaggac caaatcgtag taatttgtgc caccagtaaa
 780
 ccagaagaaa tagatgaatc ccttcggagg tacttcatga aacgactttt aatcccaact
 840
 cctgacagca cagcgaggca ccagataata gtacaactgc tctcacagca caattactgt
 900
 ctcaatgaca aggagtttgc actgctcgtc cagcgcacag aaggcttttc tggactagat
 960
 gtggctcatt tgtgtcagga agcagtgggt ggc
 993

<210> 880

<211> 331

<212> PRT

<213> Homo sapiens

<400> 880

Xaa	Leu	Ala	Phe	Lys	Pro	Thr	Arg	Gln	Leu	Met	Ser	Ser	Glu	Gln	Gln
1			5						10				15		
Arg	Lys	Phe	Ser	Ser	Gln	Ser	Ser	Arg	Ala	Leu	Thr	Pro	Pro	Ser	Tyr
		20					25					30			
Ser	Thr	Ala	Lys	Asn	Ser	Leu	Gly	Ser	Arg	Ser	Ser	Glu	Ser	Phe	Gly
		35				40					45				
Lys	Tyr	Thr	Ser	Pro	Val	Met	Ser	Glu	His	Gly	Asp	Glu	His	Arg	Gln
		50				55					60				
Leu	Leu	Ser	His	Pro	Met	Gln	Gly	Pro	Gly	Leu	Arg	Ala	Ala	Thr	Ser
65				70					75					80	
Ser	Asn	His	Ser	Val	Asp	Glu	Gln	Leu	Lys	Asn	Thr	Asp	Thr	His	Leu
			85					90					95		
Ile	Asp	Leu	Val	Thr	Asn	Glu	Ile	Ile	Thr	Gln	Gly	Pro	Pro	Val	Asp
		100					105					110			
Trp	Asn	Asp	Ile	Ala	Gly	Leu	Asp	Leu	Val	Lys	Ala	Val	Ile	Lys	Glu

```

      115              120              125
Glu Val Leu Trp Pro Val Leu Arg Ser Asp Ala Phe Ser Gly Leu Thr
  130              135              140
Ala Leu Pro Arg Ser Ile Leu Leu Phe Gly Pro Arg Gly Thr Gly Lys
  145              150              155              160
Thr Leu Leu Gly Arg Cys Ile Ala Ser Gln Leu Gly Ala Thr Phe Phe
      165              170              175
Lys Ile Ala Gly Ser Gly Leu Val Ala Lys Gly Leu Gly Glu Ala Glu
      180              185              190
Lys Ile Ile His Ala Ser Phe Leu Val Ala Arg Cys Arg Gln Pro Ser
      195              200              205
Val Ile Phe Val Ser Asp Ile Asp Met Leu Leu Ser Ser Gln Val Asn
      210              215              220
Glu Glu His Ser Pro Val Ser Arg Met Arg Thr Glu Phe Leu Met Gln
  225              230              235              240
Leu Asp Thr Val Leu Thr Ser Ala Glu Asp Gln Ile Val Val Ile Cys
      245              250              255
Ala Thr Ser Lys Pro Glu Glu Ile Asp Glu Ser Leu Arg Arg Tyr Phe
      260              265              270
Met Lys Arg Leu Leu Ile Pro Leu Pro Asp Ser Thr Ala Arg His Gln
      275              280              285
Ile Ile Val Gln Leu Leu Ser Gln His Asn Tyr Cys Leu Asn Asp Lys
      290              295              300
Glu Phe Ala Leu Leu Val Gln Arg Thr Glu Gly Phe Ser Gly Leu Asp
  305              310              315              320
Val Ala His Leu Cys Gln Glu Ala Val Val Gly
      325              330

```

<210> 881

<211> 313

<212> DNA

<213> Homo sapiens

<400> 881

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cgctgtgagcg tcgacaatgc tccaggaacc ggtgtgtatg aggccgggga ttctaccggg
60
cgtggttttgc agggcatgcg tgagcgcgcc cgtatccatg gcggcaccgc gcctgtggggc
120
gactgcagct attatgaagg cgggtttcaac gtcacggttg agattcaac atgagcggcc
180
aaaggatgaa catggacacg acgcgcccc atcacggtcg gggcttgccg acgatcagcc
240
ggctgggtgc gcaccggttt tgccatgggt ctggattcgc aggacgacat caccgtgggc
300
tggcaagccg acn
313

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<210> 882

<211> 57

<212> PRT

<213> Homo sapiens

<400> 882

```

Arg Val Ser Val Asp Asn Ala Pro Gly Thr Gly Val Tyr Glu Ala Gly

```

```

      1           5           10           15
Asp Ser Thr Gly Arg Gly Leu Gln Gly Met Arg Glu Arg Ala Arg Ile
      20           25           30
His Gly Gly Thr Ala Arg Trp Gly Asp Ser Gln Tyr Tyr Glu Gly Gly
      35           40           45
Phe Asn Val Thr Val Glu Ile Pro Thr
      50           55

```

<210> 883

<211> 576

<212> DNA

<213> Homo sapiens

<400> 883

```

naattaagat ctggggtccc agtgtcattg gtgaaggcct tgggattcga ggcagctgag
60
tcctcactga ccaaggcaag ccatgcttct gagtgcttga gggcaccgaa atgaacaaat
120
ggaaaaacact cccatctttt tcaagcctac cttttagcag aagaggcaga tacacaagcc
180
ctaaagatgt aacatcaggc tgagtggagg aagcctgaga agaaaaataa agcaggctca
240
ggaggagaga gtgatgtcag gatgcccttg tgcttactcc agcctccttg tgaaccacca
300
gctctctctg tccccagtga agacttggat ggcagccatc aggggaaggct ggggcccgag
360
tgaggagtatg ggtgtgagct ctatagacca tccctctctg caatcaataa acacttgctc
420
gtgaaagagg cccaagccac catcgcgatg gacaccagtg caatggggcc caccgcctg
480
gtcctcagtg actgtgccac cagccatggg agcctgcgca tccaaactgct gcataagctc
540
tccttctctg tgaacgcctt agctaagcag gtcgatg
576

```

<210> 884

<211> 105

<212> PRT

<213> Homo sapiens

<400> 884

```

Met Pro Leu Cys Leu Leu Gln Pro Pro Cys Glu Asn Pro Ala Leu Leu
      1           5           10           15
Ser Pro Ser Glu Asp Leu Asp Gly Ser His Gln Gly Arg Leu Gly Pro
      20           25           30
Ser Trp Glu Tyr Gly Cys Glu Leu Tyr Arg Pro Ser Leu Ser Ala Ile
      35           40           45
Asn Lys His Leu Pro Val Lys Glu Ala Gln Ala Thr Ile Arg Met Asp
      50           55           60
Thr Ser Ala Ser Gly Pro Thr Arg Leu Val Leu Ser Asp Cys Ala Thr
      65           70           75           80
Ser His Gly Ser Leu Arg Ile Gln Leu Leu His Lys Leu Ser Phe Leu
      85           90           95
Val Asn Ala Leu Ala Lys Gln Val Met

```

100

105

<210> 885
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 885
 actagtggcg ccctcatccg ggccgctgtc ccgctctcgg agtcggctgc gttggagtcc
 60
 ggtgaggcga tgctgacgaa cgacacaccg gtgacttggg atggcgggaa agtacggggc
 120
 agggcgggtgt cgcgcctcgg tgcgatcgag ttgtcgtcga ccccggtccg cccagatccg
 180
 gtacgggctc gccacgtggc gctggaagca gtgaggctcg ggggacttga cgtagcgagc
 240
 ctgacgaaga acggtgaatc tttgcgacgc cgtcttgccc tggcccatcg ggtgtttggt
 300
 gatccctggc ccgatgtcag cgatgaggct ctgctagcct gcgccgagga gtggtttgac
 360
 ctcgacgcgt
 370

<210> 886
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 886
 Thr Ser Gly Ala Leu Ile Arg Ala Ala Val Pro Leu Ser Glu Ser Ala
 1 5 10 15
 Ala Leu Glu Ser Gly Glu Ala Met Leu Thr Asn Asp Thr Pro Val Thr
 20 25 30
 Trp Asp Gly Gly Lys Val Arg Gly Arg Arg Val Ser Arg Leu Gly Ala
 35 40 45
 Ile Glu Leu Ser Ser Thr Pro Val Arg Pro Asp Pro Val Arg Ala Arg
 50 55 60
 His Val Ala Leu Glu Ala Val Arg Ser Gly Gly Leu Asp Val Ala Ser
 65 70 75 80
 Leu Thr Lys Asn Gly Glu Ser Leu Arg Arg Arg Leu Ala Leu Ala His
 85 90 95
 Arg Val Phe Gly Asp Pro Trp Pro Asp Val Ser Asp Glu Ala Leu Leu
 100 105 110
 Ala Cys Ala Glu Glu Trp Leu Asp Leu Asp Ala
 115 120

<210> 887
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 887
 cagggcggtg cgctcggtcg cgtgctgccg atggtcatgc tcggaggctt aaccgccatc
 60

attatctccg gctgcctgaa ccagcttggt aaacgctatc cgcctctgac cggcgaaggc
 120
 caactgatgc caaacctgac taatgctgat accacggctt cccaacggcg gttctccggt
 180
 aaagcggacg tgaccacccat tgcctccggc gcgttgctgg ccgtgctgct ttacatgggt
 240
 ggtaggttgg ttcacaagtt gattggcctg cctgctccgg ctggcatgtt gtttgtggcg
 300
 gtgctgggtca aactgtgcaa cggcgcttct ccccgctgac tcgaaggctc gcagggtgggt
 360
 tacaaaattct tccagacctc cgtcacctat ccgattctgt tcgcccgttg cgtggcgatt
 420
 acgcccgtggc aggaactggt caacgcg
 447

<210> 888

<211> 149

<212> PRT

<213> Homo sapiens

<400> 888

Gln Gly Val Ala Leu Gly Arg Val Leu Pro Met Val Met Leu Gly Gly
 1 5 10 15
 Leu Thr Ala Ile Ile Ile Ser Gly Cys Leu Asn Gln Leu Gly Lys Arg
 20 25 30
 Tyr Pro His Leu Thr Gly Glu Gly Gln Leu Met Pro Asn Arg Ala Asn
 35 40 45
 Ala Asp Thr Thr Ala Ser Gln Pro Ala Phe Ser Gly Lys Ala Asp Val
 50 55 60
 Thr Thr Ile Ala Ser Gly Ala Leu Leu Ala Val Leu Leu Tyr Met Val
 65 70 75 80
 Gly Arg Leu Val His Lys Leu Ile Gly Leu Pro Ala Pro Val Gly Met
 85 90 95
 Leu Phe Val Ala Val Leu Val Lys Leu Cys Asn Gly Ala Ser Pro Arg
 100 105 110
 Leu Leu Glu Gly Ser Gln Val Val Tyr Lys Phe Phe Gln Thr Ser Val
 115 120 125
 Thr Tyr Pro Ile Leu Phe Ala Val Gly Val Ala Ile Thr Pro Trp Gln
 130 135 140
 Glu Leu Val Asn Ala
 145

<210> 889

<211> 450

<212> DNA

<213> Homo sapiens

<400> 889

ggtaccacccc cacacctgac aagaggtggc caggaggaggaa gggagggttc ttacctcccc
 60
 atctccccctc agtaaaattc aggatgccca gtgaagtgtt aatgtcagat aaacaatttg
 120
 ttagtataag gatgtacctc gcattgaaat gatgccttgt aatttactaa atctgcaact
 180

atgcagcctt atttcatggc gggcagtgcc ggtgatccca ggtttcaggc gcggggaagg
 240
 gtgctgggga gatcctgagg tcaggaaccc gtacacctct gcttctgccc tcttctccct
 300
 gtgccggcca caaggcaatg actcctgtgt gggcgcagag gcagaaatgg gtctggaagg
 360
 ggattccccc tgtctggcaa gttctggtaa attctgcatt ggaggttctc tctgtagtaa
 420
 ggggagttgg cctggccgcc cttcacgcgt
 450

<210> 890

<211> 100

<212> PRT

<213> Homo sapiens

<400> 890

Met	Met	Pro	Cys	Asn	Leu	Leu	Asn	Leu	Gln	Leu	Cys	Ser	Leu	Ile	Ser
1				5					10					15	
Trp	Arg	Ala	Val	Ala	Val	Ile	Pro	Gly	Phe	Arg	Gly	Gly	Glu	Gly	Cys
			20					25					30		
Trp	Gly	Asp	Pro	Glu	Val	Arg	Asn	Pro	Tyr	Thr	Ser	Ala	Ser	Ala	Leu
		35					40				45				
Ser	Ser	Leu	Cys	Arg	Pro	Gln	Gly	Asn	Asp	Ser	Cys	Val	Gly	Ala	Glu
		50				55					60				
Ala	Glu	Met	Gly	Leu	Glu	Gly	Asp	Ser	Gln	Cys	Leu	Ala	Ser	Ser	Gly
65				70					75					80	
Lys	Phe	Cys	Ile	Gly	Gly	Ser	Leu	Cys	Ser	Lys	Gly	Ser	Trp	Pro	Gly
				85					90					95	
Arg	Pro	Ser	Arg												
				100											

<210> 891

<211> 318

<212> DNA

<213> Homo sapiens

<400> 891

nncaccgtcc ccgtactgga tccgcgcgag gatttcgccg actgcatgca cattgacgta
 60
 ctggatccct tccacactga caacaccagt gacacagtg acctggccac agatggccag
 120
 actaacggcc cggtgatag cgggactggc acccactctg agcagggaaa ctccgacata
 180
 tctagcccc tcagctctag tgacgtgct aacaccaccg acagcactgc tggcaatacc
 240
 ggtgaaggta ctgccgcgaa tatgcctggt gacatggctc attcttcgac ggctaccac
 300
 ccctatgcaa gcaccggt
 318

<210> 892

<211> 106

<212> PRT

<213> Homo sapiens

<400> 892

```

Xaa Thr Val Pro Val Leu Asp Pro Arg Glu Asp Phe Ala Asp Cys Met
 1           5           10           15
His Ile Asp Val Leu Asp Pro Phe His Thr Asp Asn Thr Ser Glu His
 20           25           30
Ser Asp Leu Ala Thr Asp Gly Gln Thr Asn Gly Pro Ala Asp Ser Gly
 35           40           45
Thr Gly Thr His Ser Glu Gln Gly Asn Ser Asp Ile Ser Ser Pro Val
 50           55           60
Ser Ser Ser Asp Ala Ala Asn Thr Thr Asp Ser Thr Ala Gly Asn Thr
 65           70           75           80
Gly Glu Gly Thr Ala Ala Asn Met Pro Gly Asp Met Ala His Ser Ser
 85           90           95
Thr Ala Thr His Pro Tyr Ala Ser Thr Gly
100           105

```

<210> 893

<211> 510

<212> DNA

<213> Homo sapiens

<400> 893

```

nnggatccta tccctgaatc taaggttggt gacacatgtg tttgggatag caaggttagag
60
aagtcacaga aaaagcctgt ggaaaacagg atgaaggagg acaaaagcag catcaggggaa
120
gcaatcacga aagccaagag tacagcaaat ataaagacag aacaggaagg tgaggcatct
180
gagaagagct tgcattctgag cccacagcat atcacacacc agactatgcc tataggacag
240
agaggcagtg agcaaggcaa acgtgtggag aacattaatg gaacctccta ccctagtcta
300
cagcagaaaa ccaatgtctg taagaaatta cataaatgtg atgaatgtgg gaaatccttc
360
aaatataatt cccgccttgt tcaacataaa attatgcaca ctggggaaaa gcgctatgaa
420
tgtgatgact gtggaggagc tttccggagc agctcgagcc ttcgggtcca caaacggatc
480
cacactgggt acggagagaa gacaacgcgt
510

```

<210> 894

<211> 170

<212> PRT

<213> Homo sapiens

<400> 894

```

Xaa Asp Pro Ile Pro Glu Ser Lys Val Gly Asp Thr Cys Val Trp Asp
 1           5           10           15
Ser Lys Val Glu Lys Ser Gln Lys Lys Pro Val Glu Asn Arg Met Lys
 20           25           30
Glu Asp Lys Ser Ser Ile Arg Glu Ala Ile Ser Lys Ala Lys Ser Thr

```


35	40	45
Ala Asn Ile Lys Thr Glu Gln Glu Gly Glu Ala Ser Glu Lys Ser Leu		
50	55	60
His Leu Ser Pro Gln His Ile Thr His Gln Thr Met Pro Ile Gly Gln		
65	70	75
Arg Gly Ser Glu Gln Gly Lys Arg Val Glu Asn Ile Asn Gly Thr Ser		
85	90	95
Tyr Pro Ser Leu Gln Gln Lys Thr Asn Ala Val Lys Lys Leu His Lys		
100	105	110
Cys Asp Glu Cys Gly Lys Ser Phe Lys Tyr Asn Ser Arg Leu Val Gln		
115	120	125
His Lys Ile Met His Thr Gly Glu Lys Arg Tyr Glu Cys Asp Asp Cys		
130	135	140
Gly Gly Thr Phe Arg Ser Ser Ser Ser Leu Arg Val His Lys Arg Ile		
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<210> 895

<211> 1119

<212> DNA

<213> Homo sapiens

<400> 895

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<210> 896

<211> 147

<212> PRT

<213> Homo sapiens

<400> 896

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	20						25						30		
Arg	Pro	Asp	Ala	Ala	Val	Gly	Arg	His	Arg	Thr	Pro	Arg	Pro	Cys	Pro
	35					40					45				
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Asp	Val	Ala	Val	Val	Ala	Tyr	Gly	Gly	Leu	Ile	Pro	Ala	Asp	Leu	
			85					90					95		
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	100						105						110		
Pro	Arg	Trp	Arg	Gly	Ala	Ala	Pro	Ile	Gln	Arg	Ala	Ile	Met	Ala	Gly
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<210> 897

<211> 384

<212> DNA

<213> Homo sapiens

<400> 897

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<210> 898

<211> 128

<212> PRT

<213> Homo sapiens

<400> 898

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Gly	Met	Ser	Leu	Asp	Asp	Tyr	Leu	Val	Gln	Leu	Ser	Lys	Glu	Gly	Leu
			20					25					30		
Glu	Thr	Arg	Leu	Ala	Gln	Leu	Tyr	Pro	Val	Glu	Ala	Arg	Arg	Asp	Ala
			35				40					45			
Gln	Arg	Asp	Thr	Tyr	Tyr	Lys	Arg	Leu	Glu	Phe	Glu	Cys	Gly	Thr	Ile
			50			55				60					
Thr	Lys	Met	Gly	Phe	Pro	Gly	Tyr	Phe	Leu	Ile	Val	Ala	Asp	Phe	Ile
65					70					75				80	
Asn	Trp	Ala	Lys	Asn	Asn	Gly	Val	Pro	Val	Gly	Pro	Gly	Arg	Gly	Ser
				85					90					95	
Gly	Ala	Gly	Ser	Leu	Val	Ala	Tyr	Ala	Leu	Gly	Ile	Thr	Asp	Leu	Glu
			100					105					110		
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<210> 899

<211> 6171

<212> DNA

<213> Homo sapiens

<400> 899

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<210> 900

<211> 734

<212> PRT

<213> Homo sapiens

<400> 900

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 20 25 30
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 35 40 45
 Pro Val Leu Val Gly His Leu His Leu Arg Ile Leu His Leu Ala Asn
 50 55 60
 Asn Gln Leu Gln Thr Phe Pro Ala Ser Lys Leu Asn Lys Leu Glu Gln
 65 70 75 80
 Leu Glu Glu Leu Asn Leu Ser Gly Asn Lys Leu Lys Thr Ile Pro Thr
 85 90 95
 Thr Ile Ala Asn Cys Lys Arg Leu His Thr Leu Val Ala His Ser Asn
 100 105 110
 Asn Ile Ser Ile Phe Pro Glu Ile Leu Gln Leu Pro Gln Ile Gln Phe
 115 120 125
 Val Asp Leu Ser Cys Asn Asp Leu Thr Glu Ile Leu Ile Pro Glu Ala
 130 135 140
 Leu Pro Ala Thr Leu Gln Asp Leu Asp Leu Thr Gly Asn Thr Asn Leu
 145 150 155 160
 Val Leu Glu His Lys Thr Leu Asp Ile Phe Ser His Ile Thr Thr Leu
 165 170 175
 Lys Ile Asp Gln Lys Pro Leu Pro Thr Thr Asp Ser Thr Val Thr Ser
 180 185 190
 Thr Phe Trp Ser His Gly Leu Ala Glu Met Ala Gly Gln Arg Asn Lys

[illegible]

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		660		665		670
Pro Lys Arg Lys Thr Gly Tyr Phe Ala Ala Pro Thr Gln Met Glu Pro						
		675		680		685
Glu Asp Gln Phe Val Val Pro His Asp Leu Glu Glu Glu Val Lys Glu						
		690		695		700
Gln Met Lys Gln His Gln Asp Ser Arg Leu Glu Pro Glu Pro His Glu						
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<210> 901

<211> 309

<212> DNA

<213> Homo sapiens

<400> 901

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309

<210> 902

<211> 102

<212> PRT

<213> Homo sapiens

<400> 902

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Gly Lys Leu His Phe Leu Phe Leu Leu Met Gln Gln Gly His Pro Lys
20 25 30
Ile Arg Leu Pro Ser Val Ser Val Val Ser Ser Asp Gly His Leu Trp
35 40 45
Ser Phe Gln Arg Leu Met His Trp Val Thr Arg His Cys Lys Arg Pro
50 55 60
Gln Ile Ala Gln His His Leu Thr Phe Thr Pro His His Ile Asn Ile
65 70 75 80
Asp Ala Arg Arg Ser Lys Ala Asp Ala Thr Phe Arg Ala Ala Ser Ile
85 90 95
Gln Lys Thr Pro Leu Met
100

<210> 903

<211> 349

<212> DNA

<213> Homo sapiens

<400> 903

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<210> 904

<211> 102

<212> PRT

<213> Homo sapiens

<400> 904

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				20				25					30		
Arg	Lys	Pro	Phe	Leu	His	Lys	Ala	Thr	Met	Gly	Leu	Pro	Lys	Ile	Lys
				35			40					45			
Pro	Cys	His	Pro	Arg	Asp	Cys	Ser	Pro	Ile	Leu	Tyr	His	His	Glu	Val
				50		55					60				
Gln	Lys	Ile	Pro	Ser	Cys	Glu	Phe	Ser	Phe	Lys	Trp	Pro	Trp	Ser	Pro
					70					75				80	
Val	Ser	Leu	Ala	Met	Trp	Gln	Lys	Gln	Thr	Ile	Leu	Phe	Gly	Gly	Tyr
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<210> 905

<211> 377

<212> DNA

<213> Homo sapiens

<400> 905

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<210> 906
<211> 125
<212> PRT
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 1           5           10           15
Pro Asp Gln Arg Leu Asn Glu Asp Ile Ile Ala Gly Asp Arg Ala
      20           25           30
Asp Ala Val Ile Ser Val Ser Gln Gly Leu Cys Asp Arg Leu Ala Gly
 35           40           45
His Gly Val Thr Ser Thr Val Val Pro Asn Ile Val Asp Val Glu Leu
 50           55           60
Phe Asp Arg Pro Asp Arg Arg His Glu Gly Thr Ile Val Val Ser Val
 65           70           75           80
Ala Thr Leu Asn Pro Gly Lys Gly Met Ile Glu Leu Ala Gln Ala Val
      85           90           95
Glu Arg Leu Pro Glu Val Gln Leu Arg Ile Ile Gly Asp Gly Pro Gln
      100          105          110
Arg His Gln Leu Glu Ala Ile Ala Ala Asp Asn Pro Arg
      115          120          125

```

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<210> 907
<211> 332
<212> DNA
<213> Homo sapiens

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<400> 907
acgcgtagga tgatgaagtc cgtcactgga tcgttcttgg gtggcaaccg ggaagtcggg
60
gaccagtctc tcaacggcga ggttcaactg aaccttgtgc cgcagggtac attcgccgag
120
cgcattcgtg ccggcgctgc tggatttgca gcattcttca cgcctactgg ctatggtaca
180
gccgtgcaga agggtagagct tggtcttaag tatgaaaga aggcaggtaa ggctgtgcc
240
gtcatgacgt ccaagccgcg tgaagtgcgc tcgtttgacg gccgtgacta tataatagaa
300
gagggtatta aggatgaata ggatatggtg aa
332

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<210> 908
<211> 106
<212> PRT
<213> Homo sapiens

```

<400> 908

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Thr Arg Arg Met Met Lys Ser Val Thr Gly Ser Phe Leu Gly Gly Asn
 1           5           10           15
Arg Glu Val Gly Asp Gln Phe Phe Asn Gly Glu Val Gln Leu Asn Leu
          20           25           30
Val Pro Gln Gly Thr Phe Ala Glu Arg Ile Arg Ala Gly Ala Ala Gly
          35           40           45
Ile Ala Ala Phe Phe Thr Pro Thr Gly Tyr Gly Thr Ala Val Gln Lys
          50           55           60
Gly Glu Leu Val Leu Lys Tyr Glu Lys Lys Asp Gly Lys Ala Val Pro
65           70           75           80
Val Met Thr Ser Lys Pro Arg Glu Val Arg Ser Phe Asp Gly Arg Asp
          85           90           95
Tyr Ile Ile Glu Glu Val Ile Lys Asp Glu
          100           105

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<210> 909

<211> 318

<212> DNA

<213> Homo sapiens

<400> 909

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acgcgctcggg catggcagct gtacagatct atcgcgctcag cagggcctac gcacacatga
60
tgccgcaggg gcaccgacgc tgtcgccatc aaaagagccg cctcgcgccc gcagcgccctc
120
ccaggggacgg cgactcacgt ggctcgacac gcgcgcgcga gtcgcgtggg tgtgtcacgc
180
cccttttttt cccaccccaa caccgaaccg gcgggccatg gctgaggatt cgcaccccat
240
tcgctccggc ttgcgcatgc tcaagcgctc ctggagctcg aatgagaatg taccgcccgc
300
acaaagctcg ccgccggc
318

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<210> 910

<211> 102

<212> PRT

<213> Homo sapiens

<400> 910

```

Met Ala Ala Val Gln Ile Tyr Arg Val Ser Arg Ala Tyr Ala His Met
 1           5           10           15
Met Pro Gln Gly His Arg Arg Cys Arg His Gln Lys Ser Arg Leu Ala
          20           25           30
Pro Ala Ala Pro Pro Arg Asp Gly Asp Ser Arg Gly Ser Thr Arg Ala
          35           40           45
Arg Glu Ser Arg Gly Cys Val Thr Pro Leu Phe Phe Pro Pro Gln His
          50           55           60
Arg Thr Gly Gly Pro Trp Leu Arg Ile Arg Thr Pro Phe Ala Pro Ala
65           70           75           80
Cys Ala Cys Ser Ser Ala Pro Gly Ala Arg Met Arg Met Tyr Arg Arg
          85           90           95
His Lys Ala Arg Arg Arg

```

100

<210> 911

<211> 506

<212> DNA

<213> Homo sapiens

<400> 911

acgcgtgtgc agcactctcc acaagctggc cccaatcact ttgcatcaa attggtacag
 60
 caaccttatg aggcctggcct tgggggaacc ctgttttagg gatgagctga acttaccggg
 120
 aggcctgcag cgaggcttgg gtgaaatgca tatctggcct ttagctgggt cggtcacct
 180
 ctgggggttg cacaggggcg ggggttctgc catggctaga atgcgctaag ggggtgaaac
 240
 gaagcctgct gggcccgga accacagagc agcctggcct ttgaaggaga ccctgtggca
 300
 cccctgtccc acccccaagt ccagccattt cacttccctg gagatgggtgc aaagcaagaa
 360
 aaaaaaaaa atccagtgtt ctccaggtcag ccttccacca gccaggattc atcgtctgat
 420
 ctgttttggg agagagcatg gagtgggtgga gatgggttgg gcccagtggt tttctgatta
 480
 actcgagtt cacctgaaac attttg
 506

<210> 912

<211> 129

<212> PRT

<213> Homo sapiens

<400> 912

Met	Phe	Gln	Val	Asn	Cys	Glu	Leu	Ile	Arg	Lys	His	Trp	Gly	Pro	Thr
1				5					10					15	
His	Leu	His	His	Ser	Met	Leu	Ser	Pro	Gln	Thr	Asp	Gln	Thr	Met	Asn
			20					25					30		
Pro	Gly	Trp	Trp	Lys	Ala	Asp	Leu	Arg	Thr	Leu	Asp	Phe	Phe	Phe	Phe
		35					40				45				
Leu	Ala	Leu	His	His	Leu	Gln	Gly	Ser	Glu	Met	Ala	Gly	Leu	Gly	Gly
	50				55				60						
Gly	Gln	Gly	Val	Pro	Gln	Gly	Leu	Leu	Gln	Arg	Pro	Gly	Cys	Ser	Val
65				70					75					80	
Val	Pro	Gly	Pro	Ser	Arg	Leu	Arg	Phe	His	Pro	Leu	Ala	His	Ser	Ser
			85					90					95		
His	Gly	Arg	Thr	Pro	Ala	Pro	Val	Pro	Thr	Pro	Glu	Val	Ser	Arg	Pro
			100				105						110		
Ala	Thr	Lys	Pro	Asp	Met	His	Phe	Thr	Pro	Thr	Ser	His	Ala	Ala	Ser
		115					120						125		

Arg

<210> 913

<211> 339

<212> DNA

<213> Homo sapiens

<400> 913

cgcttcatgg cgtgggttcag gcgtacgggt cgggtactgt gtgactaccg tggcacgaaa
 60
 tttttcgttc gcgagaacgg taaaaccttc gcaacctcga tgttcattgt ttgtgtcgcc
 120
 ctggggcgcca cggacctgct tttegccttc gactcgattc cggcgctcta tggtttcacc
 180
 aacgaggggt accttacct taccgctaac gtctttgttc tcatgggctt gcgtcagttg
 240
 tatttcctta ttggaagcct gttggaacgt ctggtgtact tgcgcgtggg actgggtcgtg
 300
 attttgggct ttatcgccct caagctcatt ggccacgcg
 339

<210> 914

<211> 113

<212> PRT

<213> Homo sapiens

<400> 914

Arg	Phe	Met	Ala	Trp	Phe	Arg	Arg	Thr	Val	Pro	Ala	Thr	Gly	Asp	Tyr
1			5					10					15		
Arg	Gly	Thr	Lys	Phe	Phe	Val	Arg	Glu	Asn	Gly	Lys	Thr	Leu	Ala	Thr
			20				25					30			
Ser	Met	Phe	Met	Val	Cys	Val	Ala	Leu	Gly	Ala	Thr	Asp	Leu	Leu	Phe
		35				40					45				
Ala	Leu	Asp	Ser	Ile	Pro	Ala	Ser	Tyr	Gly	Phe	Thr	Asn	Glu	Gly	Tyr
	50				55					60					
Leu	Ile	Leu	Thr	Ala	Asn	Val	Phe	Ala	Leu	Met	Gly	Leu	Arg	Gln	Leu
65				70				75				80			
Tyr	Phe	Leu	Ile	Gly	Ser	Leu	Leu	Glu	Arg	Leu	Val	Tyr	Leu	Ser	Leu
			85					90				95			
Gly	Leu	Val	Val	Ile	Leu	Gly	Phe	Ile	Ala	Leu	Lys	Leu	Ile	Gly	His
		100					105					110			

Ala

<210> 915

<211> 663

<212> DNA

<213> Homo sapiens

<400> 915

nnggtacctg tcaatcagta tgtaaacctc actttatgtc gtggttatcc acttctgat
 60
 gacagtgaag atcctgttgt ggacattgtt gctgctaccc cctgcatcaa tggacagtca
 120
 ttaaccaagg gagagacttg catgaatcct caggattttta agccaggagc aatgggttctg
 180
 gaggagaatg gaaaatcggg acacactttg actgggtgatg gtctcaatgg accatcagat
 240

gcaagtgcgc agagagtatc catggcatcg tcaggcagct cccagcctga actagtgcact
 300
 atccctttga ttaagggccc taaaggggtt ggggttgcga ttgctgacac ccctactgga
 360
 cagaagggtga aaatgatact ggatagtcag tgggtgcaag gccttcagaa aggagatata
 420
 attaagggaaa tataccatca aaatgtgcag aatttaacac atctccaagt ggtagagggtg
 480
 ctaaagcagt ttccagtagg tgctgatgta ccattgctta tettaagagg aggtccccct
 540
 tcaccaacca aaagtgccaa aatgaaaaca gataaaaagg aaaatgcagg aagtttggag
 600
 gccataaatg agcctattcc tcagcctatg ccttttccac cgagcattat caggtcagga
 660
 tcc
 663

<210> 916

<211> 221

<212> PRT

<213> Homo sapiens

<400> 916

Xaa	Val	Pro	Val	Asn	Gln	Tyr	Val	Asn	Leu	Thr	Leu	Cys	Arg	Gly	Tyr
1				5					10					15	
Pro	Leu	Pro	Asp	Asp	Ser	Glu	Asp	Pro	Val	Val	Asp	Ile	Val	Ala	Ala
			20					25					30		
Thr	Pro	Val	Ile	Asn	Gly	Gln	Ser	Leu	Thr	Lys	Gly	Glu	Thr	Cys	Met
		35					40					45			
Asn	Pro	Gln	Asp	Phe	Lys	Pro	Gly	Ala	Met	Val	Leu	Glu	Gln	Asn	Gly
	50				55					60					
Lys	Ser	Gly	His	Thr	Leu	Thr	Gly	Asp	Gly	Leu	Asn	Gly	Pro	Ser	Asp
65				70					75				80		
Ala	Ser	Glu	Gln	Arg	Val	Ser	Met	Ala	Ser	Ser	Gly	Ser	Ser	Gln	Pro
			85					90					95		
Glu	Leu	Val	Thr	Ile	Pro	Leu	Ile	Lys	Gly	Pro	Lys	Gly	Phe	Gly	Phe
	100						105						110		
Ala	Ile	Ala	Asp	Ser	Pro	Thr	Gly	Gln	Lys	Val	Lys	Met	Ile	Leu	Asp
	115					120					125				
Ser	Gln	Trp	Cys	Gln	Gly	Leu	Gln	Lys	Gly	Asp	Ile	Ile	Lys	Glu	Ile
	130				135					140					
Tyr	His	Gln	Asn	Val	Gln	Asn	Leu	Thr	His	Leu	Gln	Val	Val	Glu	Val
145				150					155					160	
Leu	Lys	Gln	Phe	Pro	Val	Gly	Ala	Asp	Val	Pro	Leu	Leu	Ile	Leu	Arg
			165					170						175	
Gly	Gly	Pro	Pro	Ser	Pro	Thr	Lys	Ser	Ala	Lys	Met	Lys	Thr	Asp	Lys
		180					185						190		
Lys	Glu	Asn	Ala	Gly	Ser	Leu	Glu	Ala	Ile	Asn	Glu	Pro	Ile	Pro	Gln
	195					200						205			
Pro	Met	Pro	Phe	Pro	Pro	Ser	Ile	Ile	Arg	Ser	Gly	Ser			
	210					215					220				

<210> 917

<211> 615

<212> DNA

<213> Homo sapiens

<400> 917

atcgtggacc agaagtcccc tgagtgtggc ttctacggcc ttacgacaa gatectgctt
 60
 ttcaaacatg accccacgtc ggccaacctc ctgcagctgg tgcgctcgtc cggagacatc
 120
 caggaggggc acctggtgga ggtggtgctg tcggcctcgg ccaccttcga ggacttcacg
 180
 atccgccgcg acgcccctcac ggtgcactcc tatcgggcgc ctgcctcttg tgatcactgc
 240
 ggggagatgc tcttcggcct agtgcgccag ggcctcaagt gcgatggctg cgggctgaac
 300
 taccacaagc gctgtgcctt cagcatcccc aacaactgta gtggggcccg caaacggcgc
 360
 ctgtcatcca cgtctctggc cagtggccac tcggtgcgcc tcggcacctc cgagtccttg
 420
 ccttgccagg ctgaagagga gccgtagcac caccgaactc ctgcctcgcc gtccccgtca
 480
 tctcttctct cctcttctgc ctcatcgat acgggcccgc ccattgagct ggacaagatg
 540
 ctgctctcca aggtcaaggt gccgcacacc ttcctcatcc acagctatac acggcccacc
 600
 gtttgccagg ctgtgc
 615

<210> 918

<211> 148

<212> PRT

<213> Homo sapiens

<400> 918

Ile	Val	Asp	Gln	Lys	Phe	Pro	Glu	Cys	Gly	Phe	Tyr	Gly	Leu	Tyr	Asp
1				5					10					15	
Lys	Ile	Leu	Leu	Phe	Lys	His	Asp	Pro	Thr	Ser	Ala	Asn	Leu	Leu	Gln
		20						25					30		
Leu	Val	Arg	Ser	Ser	Gly	Asp	Ile	Gln	Glu	Gly	Asp	Leu	Val	Glu	Val
		35					40					45			
Val	Leu	Ser	Ala	Ser	Ala	Thr	Phe	Glu	Asp	Phe	Gln	Ile	Arg	Pro	His
		50				55					60				
Ala	Leu	Thr	Val	His	Ser	Tyr	Arg	Ala	Pro	Ala	Phe	Cys	Asp	His	Cys
65				70					75					80	
Gly	Glu	Met	Leu	Phe	Gly	Leu	Val	Arg	Gln	Gly	Leu	Lys	Cys	Asp	Gly
			85						90					95	
Cys	Gly	Leu	Asn	Tyr	His	Lys	Arg	Cys	Ala	Phe	Ser	Ile	Pro	Asn	Asn
			100					105					110		
Cys	Ser	Gly	Ala	Arg	Lys	Arg	Arg	Leu	Ser	Ser	Thr	Ser	Leu	Ala	Ser
		115					120					125			
Gly	His	Ser	Val	Arg	Leu	Gly	Thr	Ser	Glu	Ser	Leu	Pro	Cys	Thr	Ala
		130					135					140			
Glu	Glu	Glu	Pro												
145															

<210> 919
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 919
 accgggtatgc gtccgctggc tgtgctcggc gacaacatca ccaccgacca tctatcgccg
 60
 acaaatgcga tctctgctga tagcgcagcg ggtgagtacc tcgccaagat gggcccgcgc
 120
 gaagaagact tcatttgcga cgcgacccat cgtggcgatc acctgaccgc acagcgcgcc
 180
 accttcgccca acccgacctt gctcaacgag atggccgtag tcgatgggtga agtgaagaaa
 240
 ggctcgcttg cccgcgtgga accggaaggc catgtgatgc gcatgtggga agcc
 294

<210> 920
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 920
 Thr Gly Met Arg Pro Leu Ala Val Leu Gly Asp Asn Ile Thr Thr Asp
 1 5 10 15
 His Leu Ser Pro Thr Asn Ala Ile Leu Leu Asp Ser Ala Ala Gly Glu
 20 25 30
 Tyr Leu Ala Lys Met Gly Pro Pro Glu Glu Asp Phe Ile Ser Asn Ala
 35 40 45
 Thr His Arg Gly Asp His Leu Thr Ala Gln Arg Ala Thr Phe Ala Asn
 50 55 60
 Pro Thr Leu Leu Asn Glu Met Ala Val Val Asp Gly Glu Val Lys Lys
 65 70 75 80
 Gly Ser Leu Ala Arg Val Glu Pro Glu Gly His Val Met Arg Met Trp
 85 90 95
 Glu Ala

<210> 921
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 921
 acgcgtttgc gcategcttt gaccggctcg acgatggctg agtaactccg cgatgttcag
 60
 aaccaggacg tgctgttggc catcgacaac atcttcgggt tctcccaggc tggttctgag
 120
 gtttcaacce tgctaggctg tatgccctcg gcgggtgggt accagcccaa cttggccgac
 180
 gagatggggc aattgcagga gcgaatcacc tcgaccctg gtcactccat cacctcgatg
 240
 caggccgtct acgtcccccg tgacgattac accgaccggg ctccggcgac gaccttcgcc
 300

cacctggatg ccaccacgga gctttctcgt gagattgcct ctctggcct gtaccggcc
 360
 gtggatccgc tggcgctcg
 378

<210> 922

<211> 126

<212> PRT

<213> Homo sapiens

<400> 922

Thr	Arg	Leu	Arg	Ile	Ala	Leu	Thr	Gly	Leu	Thr	Met	Ala	Glu	Tyr	Phe
1				5					10					15	
Arg	Asp	Val	Gln	Asn	Gln	Asp	Val	Leu	Leu	Phe	Ile	Asp	Asn	Ile	Phe
			20					25						30	
Arg	Phe	Ser	Gln	Ala	Gly	Ser	Glu	Val	Ser	Thr	Leu	Leu	Gly	Arg	Met
			35				40					45			
Pro	Ser	Ala	Val	Gly	Tyr	Gln	Pro	Asn	Leu	Ala	Asp	Glu	Met	Gly	Gln
	50					55					60				
Leu	Gln	Glu	Arg	Ile	Thr	Ser	Thr	Arg	Gly	His	Ser	Ile	Thr	Ser	Met
65					70					75				80	
Gln	Ala	Val	Tyr	Val	Pro	Ala	Asp	Asp	Tyr	Thr	Asp	Pro	Ala	Pro	Ala
			85					90					95		
Thr	Thr	Phe	Ala	His	Leu	Asp	Ala	Thr	Glu	Leu	Ser	Arg	Glu	Ile	
		100						105					110		
Ala	Ser	Arg	Gly	Leu	Tyr	Pro	Ala	Val	Asp	Pro	Leu	Ala	Ser		
		115					120				125				

<210> 923

<211> 571

<212> DNA

<213> Homo sapiens

<400> 923

accggtatcg aactgccgca agacacgggc aagcatgtcg ccgacgaaca actgcaacgc
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 ctggacaccg cgctggagca cgtgcgcgga gaaatccgca ttaccctgga gcatgcacgc
 120
 caacgcaaga atgtcgaaga agaagacatc ttcgcccgcc accttgcgct attggaagac
 180
 cccacgctgc tggacgccgc cactggtgcc atcgaacacg gcagcgccgc caccacgcgc
 240
 tggcgcgatg caatccaggc gcaatgcgcc gtgttgctgg ccttgggcaa accgctgttt
 300
 gccgagcgcg ccaacgacct gcgcgatctg caacagcgag tactgcgtgc gctgttgggg
 360
 gaagcctggc acttcgaatt gccggccggg ccgattttca ggnnggcat taacttacc
 420
 ccttcgcct tgttgcaact gactgcccc aacgccgtgg gtatttgcac ggccaaggcc
 480
 ggcgctactg ctcacgtcgc gattttggcc cgaggcaagg gcttgccgtg cgtggctcgc
 540
 ctggcgccgc aagtgtctga cgtgccccaa g
 571

<210> 924
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 924
 Thr Gly Ile Glu Leu Pro Gln Asp Thr Gly Lys His Val Ala Asp Glu
 1 5 10 15
 Gln Leu Gln Arg Leu Asp Thr Ala Leu Glu His Val Arg Gly Glu Ile
 20 25 30
 Arg Ile Thr Leu Glu His Ala Arg Gln Arg Lys Asn Val Glu Glu Glu
 35 40 45
 Asp Ile Phe Ala Ala His Leu Ala Leu Leu Glu Asp Pro Thr Leu Leu
 50 55 60
 Asp Ala Ala Thr Gly Ala Ile Glu His Gly Ser Ala Ala Thr His Ala
 65 70 75 80
 Trp Arg Asp Ala Ile Gln Ala Gln Cys Ala Val Leu Leu Ala Leu Gly
 85 90 95
 Lys Pro Leu Phe Ala Glu Arg Ala Asn Asp Leu Arg Asp Leu Gln Gln
 100 105 110
 Arg Val Leu Arg Ala Leu Leu Gly Glu Ala Trp His Phe Glu Leu Pro
 115 120 125
 Ala Gly Pro Ile Phe Arg Xaa Ala Ile Asn Leu Pro Pro Ser Ala Leu
 130 135 140
 Leu Gln Leu Ser Ala Gln Asn Ala Val Gly Ile Cys Met Ala Glu Gly
 145 150 155 160
 Gly Ala Thr Ser His Val Ala Ile Leu Ala Arg Gly Lys Gly Leu Pro
 165 170 175
 Cys Val Val Ala Leu Gly Ala Glu Val Leu Asp Val Pro Gln
 180 185 190

<210> 925
 <211> 620
 <212> DNA
 <213> Homo sapiens

<400> 925
 acgcgtgcac tgtgtgtatg catggtaacg tacacgtgtg cactgtgtgt ggtgtgcatg
 60
 ncactggtgtg tgcacgtgtg cnaactgtgta tgcacgtgtaa tgtgcacgtg tgcactgtgtg
 120
 gtggtgtgtg tgcacgtgtg gtgcacgtgt gcactgtgtg tgtgtgtatg catgtgtgtg
 180
 cactgtgtgcc tgtgtgtatg catggtaatg tgcgtgtgca ctgtgtggtg tgtatgcatg
 240
 tgtgtgcacg tgtgcactgt gtatgcatag tgtgtgcacg tgtgcactgt gtgtggatgc
 300
 atggtaatatg gcacgtgtgc actgtgtgtg gtgtgtatga tgggtgtgtgc acgtgtgcac
 360
 ggtgtgtggt gtgtatgcat gtgtgtgcac gtgtgcactg tgtggcaggg gtgtttggtg
 420
 tgtgtgcatg tatgcatggt gtgtgcatac gtgtgcagca gcacctgtgc ccatctccag
 480

tgcccagcag catcacacgc accttgggtgc ttataaatg catggtcagt gaggctgcc
 540
 gcaccaagct gtccctttac cataaacacct ggaatagtca cctgtgataa gctatcacat
 600
 aggaaacatt tttaaaattt
 620

<210> 926

<211> 89

<212> PRT

<213> Homo sapiens

<400> 926

Thr	Arg	Ala	Leu	Cys	Val	Cys	Met	Val	Thr	Tyr	Thr	Cys	Ala	Leu	Cys
1				5					10					15	
Val	Val	Cys	Met	Xaa	Trp	Cys	Val	His	Val	Cys	Xaa	Cys	Val	Cys	Met
		20					25					30			
Val	Met	Cys	Thr	Cys	Ala	Leu	Cys	Val	Val	Cys	Met	His	Gly	Val	Cys
		35				40					45				
Thr	Cys	Ala	Leu	Cys	Val	Cys	Val	Cys	Met	Cys	Val	His	Val	Cys	Leu
	50				55					60					
Cys	Val	Cys	Met	Val	Met	Cys	Val	Cys	Thr	Val	Trp	Cys	Val	Cys	Met
65					70					75				80	
Cys	Val	His	Val	Cys	Thr	Val	Tyr	Ala							
				85											

<210> 927

<211> 360

<212> DNA

<213> Homo sapiens

<400> 927

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 aagaggcatt tggggctctg ttcagatcat tccaacagca aaccggggcat ggagaccccc
 120
 tctcaggtct gtgttctctt gggggccacc cagccatcct gccaccaccg tcagagggcag
 180
 ggacaaagcc ctccaagag gcagcaggca gcaagggtca gccagcgcag tggggacagg
 240
 caggtataac ctggaaaacc caaaggaccc cagatggcaa tgtgacacgg cccatccacc
 300
 aagcacctgt aatgccggct tcccacagag gcgagccaga tcttggcact attctttaag
 360

<210> 928

<211> 111

<212> PRT

<213> Homo sapiens

<400> 928

Met	Glu	Leu	Leu	Glu	Ile	Val	Arg	His	Asp	Gln	Arg	Glu	Glu	Ala	Phe
1				5					10					15	
Gly	Val	Leu	Phe	Arg	Ser	Phe	Gln	Gln	Gln	Thr	Gly	His	Gly	Asp	Pro

ntccccag	ggccgagtct	tccggagtca	gcagagagcc	tggatggatc	acaggaggat
60	aagcctcggg	gctcatgtgc	ggagcccaat	tttactgata	cggaatggg
120	aacaacagcc	ggctcaaggc	caaggcgctg	ggccagcagc	acaacgcca
180	aaccagagct	ttgaggagct	gcgagcagcc	tgcttaagaa	agggggagct
240	cccttattcc	ctgtctgaacc	cagctcactg	ggcttcaagg	acctggggcc
300	aatgtgcaga	acatctcctg	gcagcgggcc	aaggatatca	taaacacccc
360	atggatggga	ttctctcaac	agacatctgc	caggggatcc	tcggggactg
420	gctgccatcg	gtctcccttac	cacctgcccc	aaactgctat	accgctgggt
480	cagagcttca	agaaaaacta	tgctggcatc	ttccattttc	agatttgcca
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600	cactcaacgc	aacgcagtga	gttctggagt	gccttgctgg	agaaggcgta
660	agtgggtcct	atgaagcatt	gtcagggggc	agtaccatgg	agggccttga
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780	aggaagggcg	tgagcgcatc	ctccctcatg	ggttgctcca	ttgaagtca
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900	cttcaggatg	tccactacag	aggcaaaatg	gaaacactga	ttcgggctgc
960	ggccggattg	agtggaatgg	agcttggagt	gacagtgcca	gggagtggga
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1080					gatgtcctac

caagatttcc tgaacaactt cacgctcctg gagatctgca acctcacgcc tgatacactc
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 1680
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 1740
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 1920
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 2100
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 2160
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 2340

<210> 930

<211> 702

<212> PRT

<213> Homo sapiens

<400> 930

Met Val Ala His Ile Asn Asn Ser Arg Leu Lys Ala Lys Gly Val Gly
 1 5 10 15
 Gln His Asp Asn Ala Gln Asn Phe Gly Asn Gln Ser Phe Glu Leu
 20 25 30
 Arg Ala Ala Cys Leu Arg Lys Gly Glu Leu Phe Glu Asp Pro Leu Phe

35					40					45					
Pro	Ala	Glu	Pro	Ser	Ser	Leu	Gly	Phe	Lys	Asp	Leu	Gly	Pro	Asn	Ser
50						55				60					
Lys	Asn	Val	Gln	Asn	Ile	Ser	Trp	Gln	Arg	Pro	Lys	Asp	Ile	Ile	Asn
65				70						75				80	
Asn	Pro	Leu	Phe	Ile	Met	Asp	Gly	Ile	Ser	Pro	Thr	Asp	Ile	Cys	Gln
				85				90						95	
Gly	Ile	Leu	Gly	Asp	Cys	Trp	Leu	Leu	Ala	Ala	Ile	Gly	Ser	Leu	Thr
		100						105				110			
Thr	Cys	Pro	Lys	Leu	Leu	Tyr	Arg	Val	Val	Pro	Arg	Gly	Gln	Ser	Phe
115						120						125			
Lys	Lys	Asn	Tyr	Ala	Gly	Ile	Phe	His	Phe	Gln	Ile	Trp	Gln	Phe	Gly
130						135				140					
Gln	Trp	Val	Asn	Val	Val	Val	Asp	Asp	Arg	Leu	Pro	Thr	Lys	Asn	Asp
145				150						155				160	
Lys	Leu	Val	Phe	Val	His	Ser	Thr	Glu	Arg	Ser	Glu	Phe	Trp	Ser	Ala
				165				170						175	
Leu	Leu	Glu	Lys	Ala	Tyr	Ala	Lys	Leu	Ser	Gly	Ser	Tyr	Glu	Ala	Leu
180								185				190			
Ser	Gly	Gly	Ser	Thr	Met	Glu	Gly	Leu	Glu	Asp	Phe	Thr	Gly	Gly	Val
195						200						205			
Ala	Gln	Ser	Phe	Gln	Leu	Gln	Arg	Pro	Pro	Gln	Asn	Leu	Leu	Arg	Leu
210						215				220					
Leu	Arg	Lys	Ala	Val	Glu	Arg	Ser	Ser	Leu	Met	Gly	Cys	Ser	Ile	Glu
225				230						235				240	
Val	Thr	Ser	Asp	Ser	Glu	Leu	Glu	Ser	Met	Thr	Asp	Lys	Met	Leu	Val
				245				250						255	
Arg	Gly	His	Ala	Tyr	Ser	Val	Thr	Gly	Leu	Gln	Asp	Val	His	Tyr	Arg
		260						265				270			
Gly	Lys	Met	Glu	Thr	Leu	Ile	Arg	Val	Arg	Asn	Pro	Trp	Gly	Arg	Ile
275						280						285			
Glu	Trp	Asn	Gly	Ala	Trp	Ser	Asp	Ser	Ala	Arg	Glu	Trp	Glu	Glu	Val
290						295				300					
Ala	Ser	Asp	Ile	Gln	Met	Gln	Leu	Leu	His	Lys	Thr	Glu	Asp	Gly	Glu
305				310						315				320	
Phe	Trp	Met	Ser	Tyr	Gln	Asp	Phe	Leu	Asn	Asn	Phe	Thr	Leu	Leu	Glu
				325				330						335	
Ile	Cys	Asn	Leu	Thr	Pro	Asp	Thr	Leu	Ser	Gly	Asp	Tyr	Lys	Ser	Tyr
340						345						350			
Trp	His	Thr	Thr	Phe	Tyr	Glu	Gly	Ser	Trp	Arg	Arg	Gly	Ser	Ser	Ala
355						360						365			
Gly	Gly	Cys	Arg	Asn	His	Pro	Gly	Thr	Phe	Trp	Thr	Asn	Pro	Gln	Phe
370						375						380			
Lys	Ile	Ser	Leu	Pro	Glu	Gly	Asp	Asp	Pro	Glu	Asp	Asp	Ala	Glu	Gly
385				390						395				400	
Asn	Val	Val	Val	Cys	Thr	Cys	Leu	Val	Ala	Leu	Met	Gln	Lys	Asn	Trp
				405				410							

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465              470              475              480
Glu Tyr Ile Ile Ile Pro Ser Thr Phe Glu Pro His Arg Asp Ala Asp
              485              490              495
Phe Leu Leu Arg Val Phe Thr Glu Lys His Ser Glu Ser Trp Glu Leu
              500              505              510
Asp Glu Val Asn Tyr Ala Glu Gln Leu Gln Glu Lys Val Ser Glu
              515              520              525
Asp Asp Met Asp Gln Asp Phe Leu His Leu Phe Lys Ile Val Ala Gly
              530              535              540
Glu Gly Lys Glu Ile Gly Val Tyr Glu Leu Gln Arg Leu Leu Asn Arg
545              550              555              560
Met Ala Ile Lys Phe Lys Ser Phe Lys Thr Lys Gly Phe Gly Leu Asp
              565              570              575
Ala Cys Arg Cys Met Ile Asn Leu Met Asp Lys Asp Gly Ser Gly Lys
              580              585              590
Leu Gly Leu Leu Glu Phe Lys Ile Leu Trp Lys Lys Leu Lys Lys Trp
595              600              605
Met Asp Ile Phe Arg Glu Cys Asp Gln Asp His Ser Gly Thr Leu Asn
610              615              620
Ser Tyr Glu Met Arg Leu Val Ile Glu Lys Ala Gly Ile Lys Leu Asn
625              630              635              640
Asn Lys Val Met Gln Val Leu Val Ala Arg Tyr Ala Asp Asp Gly Leu
              645              650              655
Ile Ile Asp Phe Asp Ser Phe Ile Ser Cys Phe Leu Arg Leu Lys Thr
660              665              670
Met Phe Thr Phe Phe Leu Thr Met Asp Pro Lys Asn Thr Gly His Ile
675              680              685
Cys Leu Ser Leu Glu Gln Trp Leu Gln Met Thr Met Trp Gly
690              695              700

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<210> 931

<211> 297

<212> DNA

<213> Homo sapiens

<400> 931

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tcgcgaagg ggcctgacat gggccagaaa atcaatcccc atggtttccg tctcggtgtg
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acgaccgac acaagaccgg ctggtacgcc gagaagcagt acgccgagct cgtgggtgag
120
gatgtcaaga tccgagagtg gctccacaag aatctggagc gcgccggtct ttcgtccatc
180
gagatcgagc gtcgctccga gcgcgtgacc attttccttt accgcgctcg cccgggcacg
240
gttatcgggc gcaatggccg ggaggccgag cgcgtgcgtn ntgagctcga aaagctt
297

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<210> 932

<211> 93

<212> PRT

<213> Homo sapiens

<400> 932

Met Gly Gln Lys Ile Asn Pro His Gly Phe Arg Leu Gly Val Thr Thr


```

      1           5           10           15
Asp His Lys Thr Arg Trp Tyr Ala Glu Lys Gln Tyr Ala Glu Leu Val
      20           25           30
Gly Glu Asp Val Lys Ile Arg Glu Trp Leu His Lys Asn Leu Glu Arg
      35           40           45
Ala Gly Leu Ser Ser Ile Glu Ile Glu Arg Arg Ser Glu Arg Val Thr
      50           55           60
Ile Phe Leu Tyr Ala Ala Arg Pro Gly Ile Val Ile Gly Arg Asn Gly
      65           70           75           80
Arg Glu Ala Glu Arg Val Arg Xaa Glu Leu Glu Lys Leu
      85           90

<210> 933
<211> 305
<212> DNA
<213> Homo sapiens

<400> 933
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120
gcgctggcca tctctccgac cgaccggat cagctggttt cggcgatcca gcaggatcaag
180
gacgaacgca agttcgtggc gctggtcgac cgtgcgcctt ccgtcaacga caacacgac
240
cgcatctct acgtggccgg caacaacccg gcgctcggcg aagtggcggg caaattcatg
300
ggcga
305

<210> 934
<211> 101
<212> PRT
<213> Homo sapiens

<400> 934
Xaa Arg Val Ala Lys Leu Leu Met Ala Glu Tyr Lys Gly Leu Asn Val
      1           5           10           15
Ile Val Lys Thr Ser Ala Asp Pro Ala Ser Gln Ala Asn Ala Val Gln
      20           25           30
Asp Leu Ala Gly Ala Gly Ile Asp Ala Leu Ala Ile Leu Pro Thr Asp
      35           40           45
Pro Asp Gln Leu Val Ser Ala Ile Gln Gln Val Lys Asp Asp Gly Lys
      50           55           60
Phe Val Ala Leu Val Asp Arg Ala Pro Ser Val Asn Asp Asn Thr Ile
      65           70           75           80
Arg Asp Leu Tyr Val Ala Gly Asn Asn Pro Ala Leu Gly Glu Val Ala
      85           90           95
Gly Lys Phe Met Gly
      100

<210> 935
<211> 333

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<212> DNA

<213> Homo sapiens

<400> 935

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 120
 gggtagcggga taaatgttcc tgggtgaagga aacagcaggg gcaaaggccc tgcagcagaa
 180
 aggagcaggg ccctttggag taacagaaa accatggtga caggagctca gaaagaccac
 240
 tgggtgttaag actataagcc agtggaggcc agattgggga atgggatggg aggggtgctt
 300
 gaagaccatg gtgaggctct cttggtcttt act
 333

<210> 936

<211> 103

<212> PRT

<213> Homo sapiens

<400> 936

Met	Val	Phe	Lys	His	Pro	Ser	His	Pro	Ile	Pro	Gln	Ser	Gly	Leu	His
1				5					10					15	
Trp	Leu	Ile	Val	Leu	Thr	Pro	Val	Val	Phe	Leu	Ser	Ser	Cys	His	His
			20					25					30		
Gly	Leu	Ser	Val	Thr	Pro	Lys	Gly	Leu	Ala	Pro	Phe	Cys	Cys	Arg	Ala
			35				40					45			
Phe	Ala	Pro	Ala	Val	Ser	Phe	Thr	Arg	Asn	Ile	Tyr	Pro	Val	Pro	Leu
			50				55				60				
Ala	Val	Ser	Ser	Ser	Val	Asp	Pro	Ser	Val	Leu	Arg	Gly	Leu	Pro	Gln
					70				75					80	
Gly	Ser	Leu	Ser	Thr	Pro	Val	Ser	Ser	Gly	Pro	Trp	Leu	Phe	His	Ser
				85					90					95	
Thr	His	Gln	Pro	Phe	Thr	Arg									
															100

<210> 937

<211> 464

<212> DNA

<213> Homo sapiens

<400> 937

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 ccggcgggagc acgagctcaa ggatctgttg acggccgacc tcatggacca gcacaacctc
 120
 gaccgtgccc tggcaggggt cggtgccagt cactgcatcg acgaagctcg cgccgaggtg
 180
 cagcggcgctg ccgatctcgc ccgtggccat ctccgcatcc ttcccgaggc cgatgcccgt
 240
 acggcggttg agaccctgtg cgacgaggtg ggttcccggg cggcctgaac cccgaccctg
 300

ccagntctgcy tcccatctcc tggccgggac cgetccagcg tctgctctct gacagctcat
 360
 cgttcttccg acaccaagga gtttctcgtg gcccgctcgc tgcgtctcat cggcattggg
 420
 cccggcaacc cggactggat caccctggct gccgtcaagg ccan
 464

<210> 938

<211> 95

<212> PRT

<213> Homo sapiens

<400> 938

Xaa	Leu	Ser	Ala	Glu	Gly	Val	Ala	Thr	Leu	Pro	Thr	Leu	Met	Leu	Gln
1				5					10				15		
Ala	Ser	Thr	Asp	Pro	Ala	Asp	Asp	Glu	Leu	Lys	Asp	Leu	Leu	Thr	Ala
			20				25					30			
Asp	Leu	Met	Asp	Gln	His	Asn	Leu	Asp	Arg	Ala	Leu	Ala	Gly	Leu	Arg
		35					40				45				
Ala	Ser	His	Val	Ile	Asp	Glu	Ala	Arg	Ala	Glu	Val	Gln	Arg	Arg	Ala
		50				55				60					
Asp	Leu	Ala	Arg	Gly	His	Leu	Ala	Ile	Leu	Pro	Ala	Gly	Asp	Ala	Arg
65					70				75				80		
Thr	Ala	Leu	Glu	Thr	Leu	Cys	Asp	Glu	Val	Gly	Ser	Arg	Ala	Ala	
				85				90					95		

<210> 939

<211> 385

<212> DNA

<213> Homo sapiens

<400> 939

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 ggactgtctc cggctcagggt ggacttcgcc gccacgaaga cccttgccctt gtcgcacggg
 120
 acatggcggg ggatcgaggt tgggtggctat gaaatccatc acgggctctc gtcgttcgct
 180
 gaggacgctg aagccttcct cgacggcgta cagctcggtc cggatggggg gacgatgtgg
 240
 caccggggcat tcgagcacga cgaattccgt cgcacgtggc tggctgacgc ggcccgtcac
 300
 gctggatcat cctggcgctc gcaactccgc gagctggggt atcaggctcg acgcgaggcg
 360
 atgatcgaaa ccctcgccga cgcgt
 385

<210> 940

<211> 128

<212> PRT

<213> Homo sapiens

<400> 940

Xaa Thr Ile Leu Asp Pro Asp Gly Gln Glu Thr Thr Pro Gly Ser Val

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      1           5           10           15
Ile Glu Gly Leu Gly Leu Leu Pro Val Glu Val Asp Phe Ala Ala Thr
      20           25           30
Lys Thr Leu Ala Leu Ser His Gly Thr Trp Arg Gly Ile Glu Val Gly
      35           40           45
Gly Tyr Glu Ile His His Gly Arg Leu Ser Phe Ala Glu Asp Ala Glu
      50           55           60
Ala Phe Leu Asp Gly Val His Val Gly Pro Val Trp Gly Thr Met Trp
      65           70           75           80
His Gly Ala Phe Glu His Asp Glu Phe Arg Arg Thr Trp Leu Ala Asp
      85           90           95
Ala Ala Arg His Ala Gly Ser Ser Trp Arg Pro His Ser Asp Glu Leu
      100          105          110
Gly Tyr Gln Ala Arg Arg Glu Ala Met Ile Glu Thr Leu Ala Asp Ala
      115          120          125

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<210> 941

<211> 348

<212> DNA

<213> Homo sapiens

<400> 941

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atcttctggt cggcggtgat cacgctggtg accatcggcc tgcgtgtttgc cggaacttc
60
gaagccatgc aaaccatggt cgtgctggcc gggctgccgt tctcggtggt gctgattttc
120
ttcatgttgc gtttcacaa ggcatgcgc caggacgtgg ccatggagca ggagcaggca
180
caattggctg aacgtggtcg ccgtggtttc agcgagcgcc tgaccgcgct ggacctgcaa
240
ccgagccagg gcaccgtgca acgctttatg gacaaacatg tgacgcggcg gttggaacaa
300
gcggcgactg cgttgcgtga tcaagggtcg gaagtgcaga ccctgctt
348

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<210> 942

<211> 116

<212> PRT

<213> Homo sapiens

<400> 942

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Ile Phe Trp Ser Ala Val Ile Thr Leu Val Thr Ile Gly Leu Leu Phe
      1           5           10           15
Ala Gly Asn Phe Glu Ala Met Gln Thr Met Val Val Leu Ala Gly Leu
      20           25           30
Pro Phe Ser Val Val Leu Ile Phe Phe Met Phe Gly Leu His Lys Ala
      35           40           45
Met Arg Gln Asp Val Ala Met Glu Gln Glu Gln Ala Gln Leu Ala Glu
      50           55           60
Arg Gly Arg Arg Gly Phe Ser Glu Arg Leu Thr Ala Leu Asp Leu Gln
      65           70           75           80
Pro Ser Gln Gly Thr Val Gln Arg Phe Met Asp Lys His Val Thr Pro
      85           90           95
Ala Leu Glu Gln Ala Ala Thr Ala Leu Arg Asp Gln Gly Leu Glu Val

```

```

                100                      105                      110
Gln Thr Leu Leu
115

<210> 943
<211> 439
<212> DNA
<213> Homo sapiens

<400> 943
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ctcctctaata gcatcctggg ctctcgtctaa ccctgtggga aacacctctc cttctctcct
120
ttgccctctt ctgtgatcac atcctcactt ctgagcctat ctgccccacc agtcaatccc
180
ccttggttct gggatgctat ttcctgggcc gcctccctct aggagtgttt agaaccctca
240
ctgtgggcag aaggagggga agatggctga ggtacctgga aaggagacgt tggatccccg
300
ggcatggaag gaaggaggca ggagagctag aaaaagggat gagatctaata gttccctaag
360
gaacctggct tagtgctggc cttcacata ctgagacatg gaatccttac tactgttctc
420
tgaggaaaga ggctgttcc
439

<210> 944
<211> 118
<212> PRT
<213> Homo sapiens

<400> 944
Met Ala Gly Ala Glu Gln Ile Glu Gln Asp Leu Val Ser Phe Ser Leu
1 5 10 15
His Phe Val Pro Pro Leu Met His Pro Gly Leu Leu Leu Thr Leu Trp
20 25 30
Glu Thr Pro Ser Leu Leu Ser Phe Ala Leu Phe Cys Asp His Ile Leu
35 40 45
Thr Ser Glu Pro Ile Cys Pro Ser Ser Gln Ser Pro Leu Val Leu Gly
50 55 60
Cys Tyr Phe Pro Gly Arg Leu Pro Leu Gly Val Phe Arg Thr Leu Thr
65 70 75 80
Val Gly Arg Arg Glu Gly Arg Trp Leu Arg Tyr Leu Glu Arg Asp Val
85 90 95
Trp Ile Pro Gly His Gly Arg Lys Glu Ala Gly Glu Leu Glu Lys Gly
100 105 110
Met Arg Ser Asn Val Pro
115

<210> 945
<211> 339
<212> DNA
<213> Homo sapiens

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<400> 945
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 gagatgggtga tatatatata tactcacaca catatatatg tgtgtgtgtg tatatatgta
 120
 tatatatata gcggtgtaca caaaacatgc actgtttact cagcaccgcc tgtttgtctc
 180
 agcaatagct tttctaaaga actgctacta tttgaaatgg agggggaggg gggctcgtga
 240
 cagagtattg tgcaagtga aagtctctgg atggggctat gtatatccta ccagccaatt
 300
 tgggtgcaaa ttggattga aggcctgcct ctgtccacn
 339

<210> 946
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 946
 Xaa Ile Arg Glu Ala Phe His Ile Phe Phe Leu Leu Ile Ile Ser Ile
 1 5 10 15
 Ala Leu Tyr Val Glu Met Val Ile Tyr Ile Tyr Thr His Thr His Ile
 20 25 30
 Tyr Val Cys Val Cys Ile Tyr Val Tyr Ile Tyr Ser Val Tyr Asn Lys
 35 40 45
 Thr Cys Thr Val Tyr Ser Ala Pro Arg Val Cys Leu Ser Asn Ser Phe
 50 55 60
 Ser Lys Glu Leu Leu Leu Phe Glu Met Glu Gly Glu Gly Gly Pro Gly
 65 70 75 80
 Gln Ser Ile Val Gln Val Glu Ser Leu Trp Met Gly Leu Cys Ile Ser
 85 90 95
 Tyr Gln Pro Ile Trp Val Gln Ile Gly Phe Glu Gly Leu Pro Leu Ser
 100 105 110
 Thr

<210> 947
 <211> 648
 <212> DNA
 <213> Homo sapiens

<400> 947
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 60
 ctctgtggcat cacacctgtg caccgggggtg gggaaggagt ggacaggagt ggacaagtga
 120
 agtagtgctg ccggctcaag cgatgcctca gcctttctgc tgtgtgctga gctttgcaga
 180
 ggagatgatg cttcaaagt gtccctgttg gggatgagca gccaggcctt tatacactgg
 240
 gacagtcagt catggatacg tggatactct ggaaaccctc atccctggag gtctgagccc
 300

ctggatacca tgccttctt aggcctggagt tgcctccctt gtccatttac cataaaaaatt
 360
 ggacaagaga ataccaggac acacctgagt ttctcatcgt atgctaaacc tgttcttcca
 420
 cgtacatccc caatgtgtac agccctactt ttttctgctg atcaagttca attacttctg
 480
 ctaagatggt gactattctt gcctgctggt ccttggatgc aaggacccca atgttcaggc
 540
 agcctttggt gccttctagc atacgaatca gagcattatc tttagggtgtg gaataagctg
 600
 ccccaaaacc tgttgaagcc agccaggcac tgtgctccct tcacgcgt
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<210> 948

<211> 154

<212> PRT

<213> Homo sapiens

<400> 948

Met	Glu	Met	Ser	Gly	Gln	Gln	Val	Tyr	Gly	Val	Leu	Val	Ala	Ser	His
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Leu	Cys	Thr	Gly	Val	Gly	Lys	Glu	Trp	Thr	Gly	Val	Asp	Lys	Ser	Ser
		20					25					30			
Ser	Ala	Ala	Gly	Ser	Ser	Asp	Ala	Ser	Ala	Phe	Leu	Leu	Cys	Ala	Lys
		35				40					45				
Leu	Cys	Arg	Gly	Asp	Asp	Ala	Ser	Lys	Leu	Ser	Leu	Leu	Gly	Met	Ser
	50				55				60						
Ser	Gln	Ala	Phe	Ile	His	Trp	Asp	Ser	Gln	Ser	Trp	Ile	Arg	Gly	Tyr
65				70					75				80		
Ser	Gly	Asn	Pro	His	Pro	Trp	Arg	Ser	Glu	Pro	Leu	Asp	Thr	Met	Pro
		85					90					95			
Phe	Leu	Gly	Trp	Ser	Cys	Cys	Pro	Cys	Pro	Phe	Thr	Ile	Lys	Ile	Gly
		100					105					110			
Gln	Glu	Asn	Thr	Arg	Thr	His	Leu	Ser	Phe	Ser	Ser	Tyr	Ala	Lys	Pro
		115				120						125			
Val	Leu	Pro	Arg	Thr	Ser	Pro	Met	Cys	Thr	Ala	Leu	Leu	Phe	Ser	Ala
	130				135						140				
Asp	Gln	Val	Gln	Leu	Leu	Leu	Leu	Arg	Trp						
145				150											

<210> 949

<211> 661

<212> DNA

<213> Homo sapiens

<400> 949

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 120
 atatgctgta acgtttctta acctaggaca gattcaagaa catggctcat cttatatctg
 180
 aggcgtgtgt tttcaccatg gcttctctcc agcaattgggt gtatttggga cagatggatt
 240

ggacatagat gacaacatca ttcactttac agtgggggaa ggcataagaa tatgggggaa
 300
 tgccaaccga gtccgagggga atttgattgc actttcgggt tggccaggaa cctatcagaa
 360
 cagaaaaagat ttaagttcaa ctctctggga tgcagcaatt gagataaata gagggacca
 420
 tacagtttta cagaataatg tagtggctgg atttggaaga gcaggatacc gcattgatgg
 480
 tgaaccttgc ccaggccagt ttaatcctgt ggaaaagtgg tttgacaatg aagcccatgg
 540
 aggtttatat gggatctata tgaaccaaga tggccttcct ggatgttctc ttatacaagg
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 660
 c
 661

<210> 950

<211> 210

<212> PRT

<213> Homo sapiens

<400> 950

Met	Met	Thr	Phe	Lys	Gly	Asn	Ala	Arg	Ile	Ser	Asn	Val	Glu	Phe	Tyr
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His	Ser	Gly	Gln	Glu	Gly	Phe	Arg	Asp	Ser	Thr	Asp	Pro	Arg	Tyr	Ala
			20					25					30		
Val	Thr	Phe	Leu	Asn	Leu	Gly	Gln	Ile	Gln	Glu	His	Gly	Ser	Ser	Tyr
		35					40					45			
Ile	Arg	Gly	Cys	Ala	Phe	His	His	Gly	Phe	Ser	Pro	Ala	Ile	Gly	Val
		50				55					60				
Phe	Gly	Thr	Asp	Gly	Leu	Asp	Ile	Asp	Asp	Asn	Ile	Ile	His	Phe	Thr
65					70					75				80	
Val	Gly	Glu	Gly	Ile	Arg	Ile	Trp	Gly	Asn	Ala	Asn	Arg	Val	Arg	Gly
			85						90					95	
Asn	Leu	Ile	Ala	Leu	Ser	Val	Trp	Pro	Gly	Thr	Tyr	Gln	Asn	Arg	Lys
			100						105				110		
Asp	Leu	Ser	Ser	Thr	Leu	Trp	His	Ala	Ala	Ile	Glu	Ile	Asn	Arg	Gly
			115				120					125			
Thr	Asn	Thr	Val	Leu	Gln	Asn	Asn	Val	Val	Ala	Gly	Phe	Gly	Arg	Ala
			130				135					140			
Gly	Tyr	Arg	Ile	Asp	Gly	Glu	Pro	Cys	Pro	Gly	Gln	Phe	Asn	Pro	Val
145					150					155				160	
Glu	Lys	Trp	Phe	Asp	Asn	Glu	Ala	His	Gly	Gly	Leu	Tyr	Gly	Ile	Tyr
				165						170				175	
Met	Asn	Gln	Asp	Gly	Leu	Pro	Gly	Cys	Ser	Leu	Ile	Gln	Gly	Phe	Thr
			180					185					190		
Ile	Trp	Thr	Cys	Trp	Asp	Tyr	Gly	Ile	Tyr	Phe	Gln	Thr	Thr	Glu	Ser
			195				200					205			
Val	His														
	210														

<210> 951

<211> 2615

<212> DNA

<213> Homo sapiens

<400> 951

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120
agcttcagcc tgactcgggt ggattgtagc ggccctgggcc cccacatcat gccggtgccc
180
atccctctgg acacagccca cttggacctg tcctccaacc ggctggagat ggtgaatgag
240
tcggtgttgg cggggccggg ctacacgacg ttggctggcc tggatctcag ccacaacctg
300
ctcaccagca tctcaccacc tgccctctcc gccttcgct acctggagtc gcttgacctc
360
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420
gtgaacctta gccacaacca gctccgggag gtctcagtg ctgccttcac gacgcacagt
480
caggggccggg cactacacgt ggacctctcc cacaacctct caccgctcgt tgcgccaccc
540
cacgagggcc ggccctgcct gcgccacct tcagagcctg aaacctggcct ggaaccggct
600
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780
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840
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1020
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1080
gtgtggccca gggccacata acagactgct gtccctgggt gcctcaggtc ccgagtaact
1140
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1200
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1320
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1440
caggtccact gggctgagtg tccccttggg cccatggccc agtcactcag gggcgagttt
1500

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cttttctaac atagcccttt ctttgccatg aggccatgag gcccgcttca tccttttcta
 1560
 ttcccttaga accttaattg tagaaggaat tgcaaagaat caagtccacc cttctcatgt
 1620
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 1680
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 1740
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 1800
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 1920
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 1980
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 gcagttcttg agcctcatct ggctgggac tccaaggggc ctctgggatt cagtccccac
 2100
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 aaggttgcat ttgttcactt ttgtaatat gtccctgggccc tgtgttgggg tggtggggga
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 2460
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 2520
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 2580
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 2615

<210> 952

<211> 357

<212> PRT

<213> Homo sapiens

<400> 952

Xaa	Pro	Ala	Pro	Thr	Met	Pro	Trp	Pro	Leu	Leu	Leu	Leu	Ala	Val
1			5					10					15	
Ser	Gly	Ala	Gln	Thr	Thr	Arg	Pro	Cys	Phe	Pro	Gly	Cys	Gln	Cys
			20				25					30		Glu
Val	Glu	Thr	Phe	Gly	Leu	Phe	Asp	Ser	Phe	Ser	Leu	Thr	Arg	Val
			35				40				45			Asp
Cys	Ser	Gly	Leu	Gly	Pro	His	Ile	Met	Pro	Val	Pro	Ile	Pro	Leu
			50			55					60			Asp
Thr	Ala	His	Leu	Asp	Leu	Ser	Ser	Asn	Arg	Leu	Glu	Met	Val	Asn
														Glu

```

65          70          75          80
Ser Val Leu Ala Gly Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu
      85          90          95
Ser His Asn Leu Leu Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu
      100         105         110
Arg Tyr Leu Glu Ser Leu Asp Leu Ser His Asn Gly Leu Thr Ala Leu
      115         120         125
Pro Ala Glu Ser Phe Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser
      130         135         140
His Asn Gln Leu Arg Glu Val Ser Val Ser Ala Phe Thr Thr His Ser
      145         150         155         160
Gln Gly Arg Ala Leu His Val Asp Leu Ser His Asn Leu Ser Pro Pro
      165         170         175
Arg Ala Pro Pro His Glu Gly Arg Pro Ala Cys Ala His His Ser Glu
      180         185         190
Pro Glu Pro Gly Leu Glu Pro Ala Pro Cys Arg Ala Gln Pro Arg Asp
      195         200         205
Leu Pro Leu Arg Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile
      210         215         220
Gly Pro Gly Ala Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu
      225         230         235         240
Ala Ser Leu Gln Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu
      245         250         255
Leu Pro Gly Leu Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Asn
      260         265         270
Trp Ala Gly Ala Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu
      275         280         285
Asp Leu Ser Gly Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu Leu
      290         295         300
His Leu Pro Ala Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys
      305         310         315         320
Arg Arg Leu Val Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser
      325         330         335
Pro Lys Val Ala Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg
      340         345         350
Gly Pro Thr Ile Leu
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<210> 953

<211> 347

<212> DNA

<213> Homo sapiens

<400> 953

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acgcgtgaag ccattccctgt gcgcaggcca gtctcgcggg ggtcaccacg gagcgtgtgc
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accacacatt ccccatccct tgatccatca ttgggcgttg aggtttttccc atgtcttgac
120
tgttgtacct ggcggctctg cggagtaacc gctcgggaca cacagtagga cgggagggag
180
aagccattgc gtttcacct ttcattggccc ttcctttccc cttccaagtg agctctttga
240
ggtgagtcac ggagggcagt gtccctctgc atcctgtctg ggggtgtcaa atatggccaa
300

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gtgggctcca tcggggcagc ggggtgggtg ggggggtgtct gtcagag
347

<210> 954

<211> 103

<212> PRT

<213> Homo sapiens

<400> 954

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Met Glu Pro Thr Trp Pro Tyr Leu Thr Thr Pro Asp Arg Met Gln Arg
 1           5           10          15
Asp Thr Ala Leu His Asp Ser Pro Gln Arg Ala His Leu Glu Gly Glu
      20          25          30
Arg Lys Gly His Glu Arg Val Lys Arg Asn Gly Phe Ser Leu Pro Ser
      35          40          45
Tyr Cys Val Ser Ala Ala Val Thr Pro Gln Ser Arg Gln Val Gln Gln
      50          55          60
Ser Arg His Gly Lys Thr Ser Thr Pro Asn Asp Gly Ser Arg Asp Gly
 65           70           75           80
Glu Ser Val Val His Thr Leu Arg Gly Asp Pro Arg Glu Thr Gly Leu
      85           90           95
Arg Thr Gly Met Ala Ser Arg
      100
```

<210> 955

<211> 634

<212> DNA

<213> Homo sapiens

<400> 955

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acgcgtgaag ggctctgcag gtgagcggct ctgcagggtga aggggtctgc aggtgagcgg
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ctctgcagggt gaattgttct gcagggtgaag ggctctgcag gtgaacgggt ctgcagggtga
120
agggctctgc aggtgaacgg ttctgcagggt gagcggctct gcagggtgagc ggctctgcac
180
gtgagtgcct ctgtgactgg ctgcgaagca gcatttgtgc acacttgact ggccacaaca
240
gaatgttctt ctctgttgc agcactgagg aggaagctcc tgcctaagcg accacagcca
300
ggcaccgcgt ccattggagac attgctctct ccagactcca ttcagactca ggaacctga
360
gctcctggaa tgcaggctga ggcagctccc acacaaaaag tatctactct ggcagttatc
420
agaggcctcc gttgcacaaa tcacacacct actgtgcctg acgtggcttg gctccagca
480
ggacccgcct ctgagaacac acgggtgcta gtccaagttc acagcagggc tcaagtcaact
540
cccacaaacc tctctataca aacacacaaa gctctgggag gctaccctgc atccaagagt
600
caccatctca cacctggaac aagggttacg gccg
634
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<210> 956

<211> 113

<212> PRT

<213> Homo sapiens

<400> 956

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Met Glu Ser Gly Glu Ser Asn Val Ser Met Glu Arg Val Pro Gly Cys
 1             5             10             15
Gly Arg Leu Gly Arg Ser Phe Leu Leu Ser Ala Asp Asn Arg Glu Glu
      20             25             30
His Ser Val Val Ala Ser Gln Val Cys Thr Asn Ala Ala Cys Glu Pro
 35             40             45
Val Thr Glu Ala Leu Thr Cys Arg Ala Ala His Leu Gln Ser Arg Ser
 50             55             60
Pro Ala Glu Pro Phe Thr Cys Arg Ala Leu His Leu Gln Asn Arg Ser
65             70             75             80
Pro Ala Glu Pro Phe Thr Cys Arg Thr Ile His Leu Gln Ser Arg Ser
      85             90             95
Pro Ala Glu Pro Phe Thr Cys Arg Ala Ala His Leu Gln Ser Pro Ser
100             105             110

```

Arg

<210> 957

<211> 823

<212> DNA

<213> Homo sapiens

<400> 957

```

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gcgctccaag cttcaggagg cccaggggaga gcacgtcctcg ccggccaccc agcacagcgt
120
gtacctctcg gccacccagc actgcgcagc cgtgggtgtcc agcctcctcg gcagccctt
180
gcccttgga caggtaaccag ctcagactcc aggccttaggg gtccctctcg aatgatgtc
240
ccctggaat gatgctcccc gagccctcca cccggctctg caccocgact ttctgcatga
300
gttccccatg ctgttaggcca cgtgggacag aaagtgcact ggagccaggc cccagtcct
360
caggtaacca cggggacctc tcctctccag gcgttttggg atcctcactg gtcctcggtg
420
gccctgcaca gcacccccac aggggaagctg ctgtttctgc ctctctctaa ggtcccaaaa
480
ctgctggct gctctgttg cccagggctc cagcacacac tggaggctgc cctcacct
540
gtgtcttggt tccggctact ccaagccttg tcctctgcag ggcatccact gctgcctgtg
600
agcagacccc tgggaactgc ctgatctgag cccctcagg agcccaagga caaccttgtc
660
tgtaccatac atcactatgt cttcccaagc tcacacctcc cagctccag caaagggcag
720
ggcgtgtcta ccaccacca gcccaactggg gtcccccttc ctcgcgagg cctccggagc
780

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atgggtctgc tggcccttcc tttctttgcc tcttagtctg gaa
823

<210> 958

<211> 105

<212> PRT

<213> Homo sapiens

<400> 958

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Met Ala Val Gly His Val Gly Gln Lys Val Thr Trp Ser Gln Ala Pro
 1           5           10          15
Val Ser Gln Val Pro Thr Gly Thr Ser Pro Leu Gln Ala Phe Trp Asp
 20          25          30
Pro His Trp Leu Arg Trp Ala Leu His Ser Thr Pro Thr Gly Lys Leu
 35          40          45
Leu Phe Leu Pro Ser Ser Lys Val Pro Lys Leu Pro Gly Cys Ser Val
 50          55          60
Gly Pro Arg Leu Gln His Thr Leu Glu Ala Ala Pro His Pro Val Ser
 65          70          75          80
Trp Phe Arg Leu Leu Gln Ala Leu Ser Ser Ala Gly His Pro Leu Leu
 85          90          95
Pro Val Ser Arg Pro Leu Gly Thr Ala
100          105
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<210> 959

<211> 586

<212> DNA

<213> Homo sapiens

<400> 959

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acagtggtag gcctgatcac cgacaacgat gaggcagcct atagggagga ggtcagagac
120
ctggcagtggt ggtgccagga taacaacctc tccctcaacg tgatcaagac cacgaagatg
180
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240
tgaggagccag ttgagagctt caagtctcct ggtgtccaca tcaccatcga actatcatgg
300
tcctaacaca ccaagacagt agtgaagagg gtgcgacaat gcctattcca cctcgtaga
360
caaaaaagat ttggaatgga tctctcagacc ctcaaaaagt ttgacatcta caccatcgag
420
agcatcatga ctggttgcat caccgcctgg tatggcaact gctcggcctc cgaccgcaag
480
gcactacaga gggtagtgcg tacggcccag tacatcactg gggctaagct tcttgccatc
540
caggacctct ataccaggcg gtgtcagcgg aagaccctga caattg
586
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<210> 960

<211> 195

<212> PRT

<213> Homo sapiens

<400> 960

Xaa His Asp Cys Met Ala Lys His Asp Ser Asn Thr Ile Ile Lys Phe
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 Ala Asp Asp Thr Thr Val Val Gly Leu Ile Thr Asp Asn Asp Glu Ala
 20 25 30
 Ala Tyr Arg Glu Glu Val Arg Asp Leu Ala Val Trp Cys Gln Asp Asn
 35 40 45
 Asn Leu Ser Ser Leu Asn Val Ile Lys Thr Thr Lys Met Ile Val Asp Tyr
 50 55 60
 Arg Lys Arg Arg Val Glu His Ala Pro Ile Leu Ile Asp Gly Ala Val
 65 70 75 80
 Trp Glu Pro Val Glu Ser Phe Lys Phe Leu Gly Val His Ile Thr Ile
 85 90 95
 Glu Leu Ser Trp Ser Lys His Thr Lys Thr Val Val Lys Arg Val Arg
 100 105 110
 Gln Cys Leu Phe His Leu Gly Arg Gln Lys Arg Phe Gly Met Asp Pro
 115 120 125
 Gln Thr Leu Lys Lys Phe Asp Ile Tyr Thr Ile Glu Ser Ile Met Thr
 130 135 140
 Gly Cys Ile Thr Ala Trp Tyr Gly Asn Cys Ser Ala Ser Asp Arg Lys
 145 150 155 160
 Ala Leu Gln Arg Val Val Arg Thr Ala Gln Tyr Ile Thr Gly Ala Lys
 165 170 175
 Leu Pro Ala Ile Gln Asp Leu Tyr Thr Arg Arg Cys Gln Arg Lys Thr
 180 185 190
 Leu Thr Ile
 195

<210> 961

<211> 502

<212> DNA

<213> Homo sapiens

<400> 961

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 120
 taaactgtat agtaacctgc taaccagtcg gaaagagcta ccaccaatg gagatactaa
 180
 atccatggta atggaccatc gagggcaacc tccagagttg gctgctcttc ccactctgta
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 360
 tcattcccca ataagtcatt ggcataatccc cagtgcatt gttcttccaa atgctaccca
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 480
 cattgatcac cccttcacgc gt
 502

<210> 962
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 962
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 Thr Pro Glu Ser Thr Pro Val Leu His Gln Lys Thr Leu Gln Ala Met
 20 25 30
 Lys Ser His Ser Glu Lys Ala His Gly His Gly Ala Ser Arg Lys Glu
 35 40 45
 Thr Pro Gln Phe Phe Pro Ser Ser Pro Pro Pro His Ser Pro Ile Ser
 50 55 60
 His Gly His Ile Pro Ser Ala Ile Val Leu Pro Asn Ala Thr His Asp
 65 70 75 80
 Tyr Asn Thr Ser Phe Ser Asn Ser Asn Ala His Lys Ala Glu Lys Lys
 85 90 95
 Leu Gln Asn Ile Asp His Pro Phe Thr Arg
 100 105

<210> 963
 <211> 1298
 <212> DNA
 <213> Homo sapiens

<400> 963
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 120
 acgccaccaca gggccagtcg ggtctgctca cagcccagg aggcgcgctg tccagccgag
 180
 ggcaagagac agagcaggtc cctgtgtatc caagtccctg agccccgtac accggcccca
 240
 ggccctgtag agagccagca gccaccatgg cgaaggagga agatgaggag aagaaagcca
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 360
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 480
 gcacgaggaa ggccgcgacc gtgctcgggt acaegtcaga gcttatgacg cacatgcgca
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 660
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 720
 aacaggccac agtggacgcc tggctgcagc gctcgagctc ccgcatgggc tcccgcaaac
 780

tcccttcccc gtccgggtgcc gagatcctgc ggccctggggg ccggctccgg aggttcccc
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 900
 cccattcca tcaactcggc tcccgcaagt cgtgtacgg gcttgagggc ttccaggacc
 960
 tgggcgagta ttatgactat caccgcgacg gcgacgacta ctacgaccgg cagtcactcc
 1020
 accgctacga ggagcaggaa cctacactgg cgggcctcgg cccctacagc ccggcctggc
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 1200
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 1298

<210> 964

<211> 235

<212> PRT

<213> Homo sapiens

<400> 964

Ser	Ala	Ser	Gln	Ala	Ala	Val	Ala	Thr	Ala	Ala	Cys	Gly	Arg	Ala	Pro
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Gly	His	Ser	Ala	Lys	Arg	Pro	Arg	Pro	Ser	Thr	Gly	Ser	Gln	Lys	Ser
			20					25					30		
Ser	Ser	Ser	Arg	Arg	Pro	Arg	Ser	Arg	Ala	Ala	Asn	Arg	Pro	Gln	Trp
			35				40				45				
Thr	Pro	Gly	Cys	Ser	Ala	Arg	Ala	Pro	Ala	Trp	Ala	Pro	Ala	Asn	Ser
	50					55				60					
Pro	Ser	Arg	Arg	Val	Pro	Arg	Ser	Cys	Gly	Leu	Gly	Ala	Gly	Ser	Gly
65				70					75					80	
Gly	Ser	Pro	Ala	Ala	Ala	Ala	Ser	Thr	Arg	Gln	Ala	Ser	Pro	Trp	Ala
			85					90						95	
Ser	Cys	Pro	Ser	Arg	Thr	Arg	Pro	His	Ser	Ile	Thr	Arg	Ala	Pro	Ala
			100					105					110		
Ser	Arg	Cys	Thr	Gly	Leu	Arg	Ala	Ser	Arg	Thr	Trp	Ala	Ser	Ile	Met
			115				120					125			
Thr	Ile	Thr	Ala	Thr	Ala	Thr	Thr	Thr	Thr	Gly	Ser	His	Ser	Thr	
			130			135					140				
Ala	Thr	Arg	Ser	Arg	Asn	Pro	Thr	Trp	Arg	Ala	Ser	Ala	Pro	Thr	Ala
145				150					155					160	
Arg	Pro	Gly	His	Pro	Thr	Ala	Thr	Thr	Thr	Gly	Thr	Arg	Pro	Arg	
			165					170						175	
Ile	Pro	Thr	Thr	Thr	Thr	Thr	Pro	Thr	Ile	Thr	Val	Ala	Pro	Leu	Ile
			180				185					190			
Arg	Gly	Thr	Pro	Thr	Ala	Thr	Ala	Thr	Thr	Ile	Thr	Asn	Pro	His	Met
			195			200						205			
Arg	Pro	Arg	Arg	Gly	Thr	Arg	Leu	Leu	Thr	Ala	Thr	Thr	Met	Gly	Thr
			210			215						220			
Arg	Ala	Arg	Arg	Thr	Leu	Met	Ala	Thr	Thr	Trp					

225

230

235

<210> 965
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 965
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 120
 aataccgcgc gtgagagctt tggcattgtc ttggtggaag ccatggcgcg aggcgcagcc
 180
 gttgttgctt cagacttgga ggccctccgc gcagtgtgca acgccgatcc cgatgatgtt
 240
 gccggcgcgc tatatcgcaa tgaggatagt aatgaccttg ctctgtact caacgagggtg
 300
 ctcgaggatc ctgagtatcg tgcccgctta gtgcac
 336

<210> 966
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 966
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 Arg Ala Asp Val Tyr Val Ala Pro Asn Thr Gly Gly Glu Ser Phe Gly
 35 40 45
 Ile Val Leu Val Glu Ala Met Ala Ala Gly Ala Val Val Ala Ser
 50 55 60
 Asp Leu Glu Ala Phe Arg Ala Val Cys Asn Ala Asp Ser Asp Asp Val
 65 70 75 80
 Ala Gly Ala Leu Tyr Arg Asn Glu Asp Ser Asn Asp Leu Ala Arg Val
 85 90 95
 Leu Asn Glu Val Leu Glu Asp Pro Glu Tyr Arg Ala Arg Leu Val His
 100 105 110

<210> 967
 <211> 393
 <212> DNA
 <213> Homo sapiens

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 120
 tcggcctccg cttcggccgc agcctgggct gcgcagact ctgcgggagg caccttctcc
 180

cggttcgcc agccaaatgg cgttgaggc tccagcatcc agtccgggtgc cttcggcacc
 240
 cccgcactgc gcagagaggc ccgcagaaac gatggcaccg gcggcgcggg aggtgataca
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 360
 ggcgagca cagggtcact tcgaggcggg gat
 393

<210> 968
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 968
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 Glu Ala Ser Gly Ser Ser Ser Ala Ser Ala Pro Val Gly Thr Glu Glu
 20 25 30
 Ser Pro Ser Ala Ser Ala Ser Ala Ala Trp Ala Ala Pro Asp Ser
 35 40 45
 Ala Gly Gly Thr Phe Ser Arg Val Arg Gln Pro Asn Gly Val Ala Gly
 50 55 60
 Ser Ser Ile Gln Ser Gly Ala Phe Gly Thr Pro Ala Leu Arg Arg Glu
 65 70 75 80
 Ala Ala Arg Asn Asp Gly Thr Gly Gly Ala Gly Gly Asp Thr Gly Ala
 85 90 95
 Ser Ala Gly Ala Leu Thr Asp Ser Gly Thr Thr Gly Ala Ala Cys Ala
 100 105 110
 Ser Cys Gly Gly Ala Thr Gly Ser Leu Arg Gly Gly Asp
 115 120 125

<210> 969
 <211> 880
 <212> DNA
 <213> Homo sapiens

<400> 969
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 ttatccttac atgtattgca gaggatcaat atgacctgc atttttgcat gatgatcaac
 120
 atgaattttc gagtaaaactt acatagaatg cctatgagac acaggaagaa ggcagcagac
 180
 aagaatctta cctgcggtc tttagtatgt gaagtactgg acctgatggt agagttttat
 240
 gtaacacaca tgatgaagga gtttcctatg gatctctata tacgctgcat ccaggtagta
 300
 cacaaactgc tctgctacca gaagaagtgt cgggtacgcc tgcattacac ctggcggggag
 360
 ctctgggtcag ccttgataaa tttgctgaag ttccttatgt caaatgagac tgtacttttg
 420
 gccaaacaca acattttttac attagccctt atgattgtga acctatttaa tatgtttatc
 480